FEBRUARY 19, 1955

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MANAGEMENT • PLANT • TRAFFIC • COMMERCIAL • LEGAL • ACCOUNTING •

Telephony

THE JOURNAL OF THE TELEPHONE INDUSTRY

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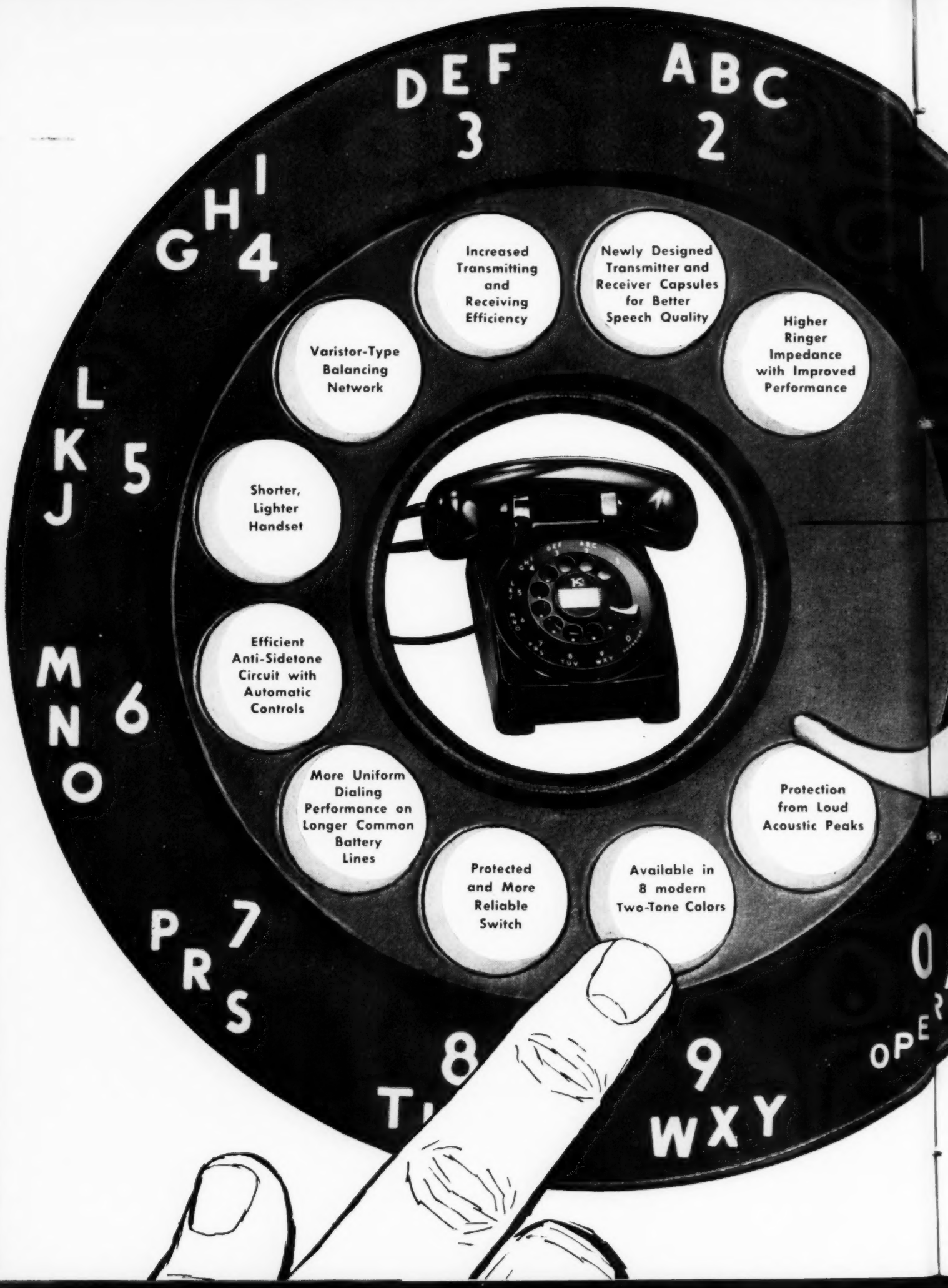
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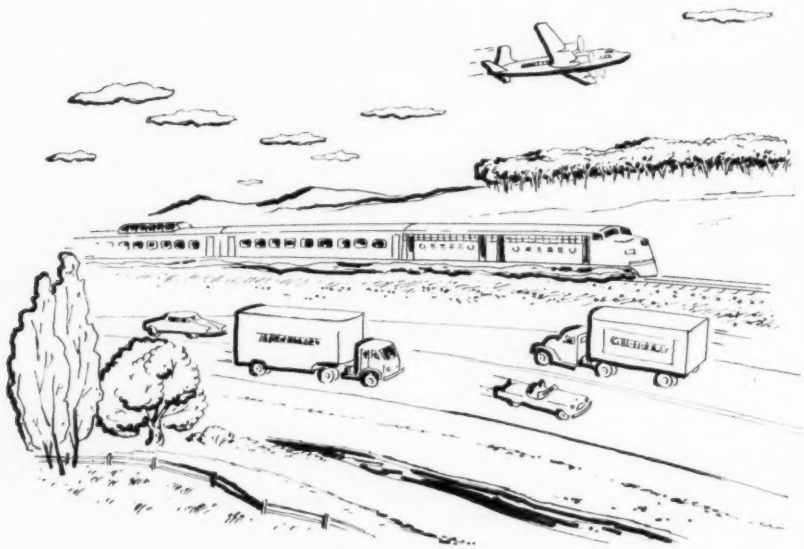

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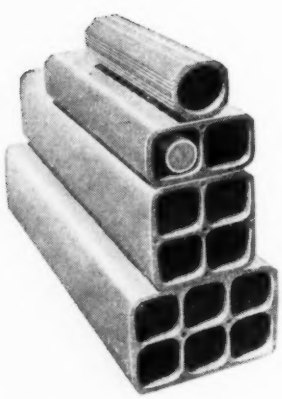

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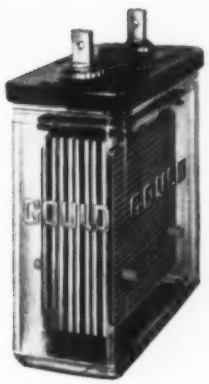

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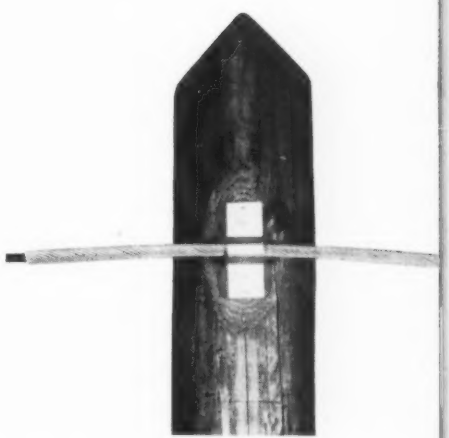

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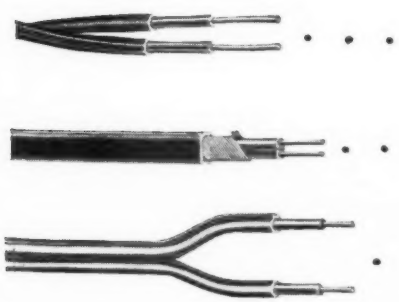

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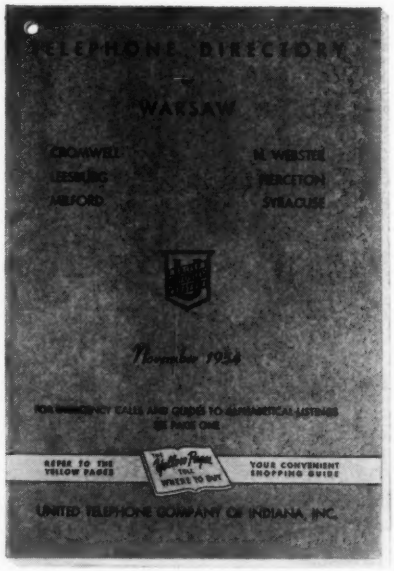

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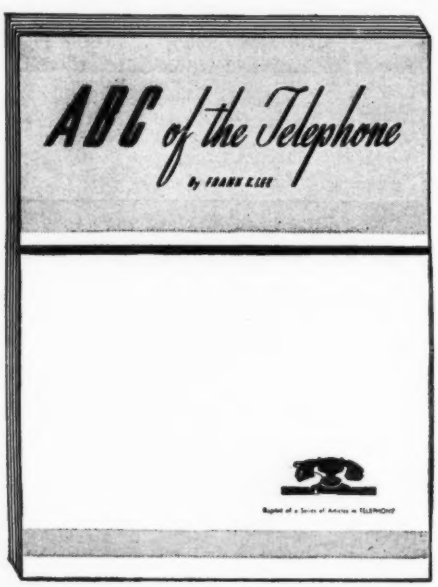

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FLASHES AND PLUGS

LETHAL WEAPON. A man in Spokane, Wash., just couldn't get over being refused a credit rating. After brooding a while, he chose his weapon, and took to calling up the manager of the loan company that had turned him down. He did not annoy the object of his attentions with conversation, merely summoned him to the telephone repeatedly, then hung up without a word—all this in the cold gray dawn between 5:30 and 7:30 a.m.

One day in January—it was some three months and 127 telephone calls later—Spokane police saw him in a paystation, chose to regard him askance, traced his call, and followed him to a cafe where he confirmed their suspicions by calling the number again.

He was sentenced to 90 days in jail on a vagrancy charge, with all but ten days suspended.

• • •

WHY CHANGE? The *Illinois Bell Telephone News* reports that "at least one of our customers has a rather quaint idea of the value of her directory; (this) we gather from a story in the Rock Island *Tell-O*.

"An intercept operator at Rock Island informed the caller that the number she was calling had been changed. 'Have you checked your new directory?' she inquired.

" 'Goodness, no, operator,' replied the subscriber aghast. 'My old one isn't nearly worn out yet!' "

• • •

CRIME CURB. Scotland Yard reports the crime rate in Great Britain is almost down to pre-war levels.

Much of the credit is going to the "999" emergency call, which permits a caller to make an immediate connection with police by dialing three 9's.

The Yard also is pleased with response to the televising of pictures of wanted criminals. This has made prolonged hiding all the more difficult in crowded Britain.

• • •

RIGHT CHURCH, WRONG PEW. A man excitedly telephoned Montreal police recently to report that the steering wheel, brake pedal, gas pedal, clutch pedal and dashboard had been stolen from his car.

A sergeant said he would investigate. Soon the telephone rang again.

"Don't bother," said the same voice—this time with a hiccup. "I got into the back seat by mistake."

CIRCULATION

Guaranteed circulation of this issue is 10,463, of which 9,947 is paid.

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February 19, 1955

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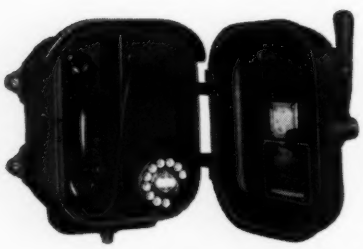
location "all wet?"



outdoor monophones will stay trouble-free!

For cab stands, police and fire boxes, boiler rooms, docks,—every exposed location where things get wet—install Outdoor Monophones! They're *made for the job,* with rubber-covered wiring, impregnated coil windings, waterproof handset cord, watertight case. Companies using them are enthusiastic about their trouble-free service. Ask for Circular T1732 today.

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NEW!

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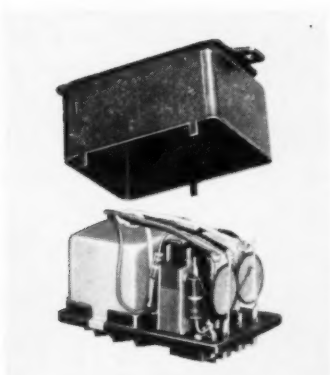

NEW!

This new Leich 100 network gives the increased side-tone control which is so necessary to maintain the gains produced by the new transmitter and receiver. It permits maximum transmission on long loops and reduces it on short ones. The Leich 100 network is made under license from Western Electric and its circuit is identical to that used in the Western type 500 telephone.

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★ ★ ★ IN THE NATION'S CAPITAL ★ ★ ★

by FRANCIS X. WELCH — WASHINGTON EDITOR

Preliminary formula for merger of AFL and CIO concluded . . . significance for labor and the public discussed . . . Taft-Hartley Act in for increased pressure from the amalgamation. Douglas' and Olds' stands on private power analyzed. FCC defers decision on "pay-as-you-see" television. Voice of America depends on telephone facilities.

THIS WRITER, in making his annual predictions for things to come in 1955 (TELEPHONY issue of Dec. 25, 1954) had this to say: "The oft-threatened marriage between the CIO and AFL looks as if it might really come off, although such a large project probably could not be completed in one year." Early this month in Miami the top leaders of the AFL and the CIO, moving more quickly than even the participants had expected, successfully concluded the preliminary formula for the merger of the country's two main labor organizations.

It is only a bare outline. Many details remain to be filled in and ratifications by constituent unions must still be secured. But it seems to be generally assumed that the merger is as good as settled. The effect upon labor, industry, and, most of all, the public at large, suggest interesting possibilities.

First, from the standpoint of labor there is both logic and strategy in the merger of the two nationally organized groups. It heals up a long-standing running sore in relationship between the two groups. But the results may be somewhat unequal between the CIO unions and the AFL unions.

As to the CIO unions, they go into this marriage, very much on the small side of the partnership. The CIO unions have successfully demonstrated the soundness of their basic principle of industrial organization (as contrasted with craft organization), because of which they pulled out of the AFL in 1935. But the CIO unions have not done as well in recent years, especially since the socialistic-minded Walter Reuther took over the helm. So the older and more conservative federation will doubtless play a dominant role, even though it must pay its respects to the proven principles of industrial union organization.

For that reason strong segments of the old CIO setup may well survive intact and expand in strength. And this will be true even though some of the more temperamental top-flight CIO leaders may eventually be kicked upstairs (after the honeymoon is over) or forced to walk the plank entirely.

Among the CIO industrial unions which may thus survive intact and in strength could be the CIO Communications Workers of America which draws its strength primarily from the telephone industry. On the other hand, there is the incipient rivalry of the telephone unions organized by the AFL's International Brotherhood of Electrical Workers. What happens here will be a development of considerable interest to the telephone industry generally. It is unlikely that the IBEW will voluntarily cut loose any of its telephone unions. And it may be that, in the closer quarters of the merger, the dominating influence of the AFL will show its effect in the final outcome.

What about the independent unions? There is no doubt that an AFL-CIO merger leaves the combined national group in a better position to concentrate on the unaffiliated independents as well as upon workers as yet unorganized. There are still some important labor leaders outside the tent, notably John L. Lewis with his United Mine Workers and the traditionally independent railroad brotherhoods. There is David Beck, head of the AFL teamsters, who has so far gone along with the merger without too much enthusiasm. He might break out of the tent at any time, if his Teamsters' Union does not inherit the membership they are looking for from other groups within the tent.

But John L. Lewis is an old man, working within a sick industry. True, no experienced observer would sell John L. Lewis short, after his numerous coups and comebacks in a long and successful career. But it is hard to see the coal miners alone remaining a very important schismatic sect of unionism for any great length of time. There would have to be Beck and a lot of other apostates before competition outside the organization would assume any impressive importance.

But what about the general public? Big business spokesmen have suggested that the AFL-CIO merger is a movement towards monopoly, just as harmful to the public welfare as big industrial monopolies which the federal government is duty bound to prevent under the Anti-trust laws. This may be true. Yet it is hard to see any government official taking his own political life in his hands by starting a divorce proceeding against the combined political power of the AFL and CIO. Such medicine is reserved strictly for big business which has more dollars than voters.

What may ultimately come out of this is a dawning realization on the part of the general public that organized labor is moving towards actual political party status, just as the Labor Party in Great Britain developed. This is not to suggest that an American Labor Party is developing independently of the two old-line political parties. It is more likely that the labor movement may seek to swallow up the Democratic party, or vice versa.

Whichever way the result turns out, there would be sharp realignment of great bodies of voters and political affiliations on the American scene. If labor were to take over the Democratic party as such, large segments of the

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old-line Democrats, particularly in the South, would be strongly tempted to bolt. If, on the other hand, party politicians move in on the labor unions, a good many idealistic unionists would seek their fortunes elsewhere.

But these political ramifications are far ahead. The chances are that the American voters might have a very independent verdict to register if a showdown on any such thing as a labor party taking control of the government in this country were placed squarely before them. The immediate outlook would seem to be for less jurisdictional strikes. That at least is one short-term advantage of the merger for the public at large.

The amalgamation will also mean increased pressure to soften up or do away with the labor restrictions of the Taft-Hartley Act. Indeed it may be on this very testing point—the Taft-Hartley Act—that the new organized labor combination will have to make its choice, whether to confine its efforts to the field of labor union activity or to try to move further into control of the legislative processes of the government. There will be many a stormy battle before this fundamental issue is finally decided. The Taft-Hartley Act looks like a very probable battleground for such a decision.

Hearings on the Economic Report

Criticism of regulation and the use of federal regulatory positions as a stepping-stone to high-salaried jobs with the regulated industry were made in recent hearings of the Joint Committee on the Economic Report. Much of the criticism came from the committee chairman, Senator Douglas (D., Ill.), who charged that "consumer representatives" had trouble getting onto the federal regulatory commissions. Senator Douglas' remarks were believed to refer in part to the Senate's refusal to confirm the reappointment of Leland S. Olds to the FPC in 1950.

Olds himself was one of the witnesses before Senator Douglas' committee. He jumped on President Eisenhower's power policy as favoring "private monopoly in the business of power supply." He thinks this will result in an undevelopment of our hydroelectric resources, tardy and inadequate development of atomic power, cramped expansion of farm electrification, and general restriction on American living standards.

Olds, who has been consistently in the forefront of the public ownership movement in the power field, ever since the Senate failed to confirm him as a member of the Federal Power Commission, summed up his criticism of the Eisenhower power policy as follows:

"With what seems a careful avoidance of the mention of electric power, the Economic Report apparently takes some pride in the administration's reversal of the power policy of the last 25 years.

"Advocating expansion of investment in conserving and utilizing soil, water, mineral, and other resources, the President indicates that 'to speed this process, the federal government has attempted to distinguish as clearly as possible the field of federal enterprise from the field of private or local enterprise.'

"He applies this to water resources by setting forth the administration's so-called 'partnership' policy under which, broadly speaking, the people would put up the nonreimbursable investment and nonfederal interests, mainly private, the reimbursable.

"This means in the main a shift of federal policy in the field of electric power from partnership with local community public or cooperative electric systems, to partnership with private monopoly. It will ultimately destroy the type of public or cooperative competition which has proved the most effective supplement to the otherwise largely ineffectual efforts to regulate utilities in the public interest."

Senator Douglas seems to be under the impression that Olds was not con-

(Please turn to page 35)

Three REA Loans to Benefit 2,000 Subscribers

The REA approved $803,000 in loans to telephone companies in three states, the U. S. Department of Agriculture announced on Feb. 8. The loan funds will be used to provide modern dial service for 2,062 farm families and other rural subscribers in Kansas, Iowa and South Carolina. Details of the loans follow:

Farragut (Iowa) Telephone Co. on Jan. 31 was given a loan of $134,000 to improve and extend rural telephone service in Fremont County.

The company now furnishes magneto service to 344 subscribers. The REA loan funds will be used to cut the system over to dial operation and add facilities to serve 29 rural families in the service area now without telephones. About 45 miles of the existing line will be rebuilt, 7 miles of new line added and a new automatic central office building constructed at Farragut. The system completed will consist of 68 miles of line.

R. A. Sells is president and manager of the Farragut company.

* * *

The Sterling (Kan.) Telephone Co. was allocated on Feb. 4 $465,000 to improve and extend rural telephone service in Reno and Rice counties.

The company plans to use the REA loan funds to cut over the existing magneto system, serving 1,060 subscribers and 53 switchers, to dial operation and provide facilities to serve 92 subscribers in the operating area now without telephones.

About 216 miles of the existing line will be rebuilt and 54 miles of new line added. The company will construct automatic central offices at Alden and Sterling. These changes and additions will make it possible for the Sterling company to furnish modern dial service to 1,205 subscribers in south central Kansas. This includes 53 subscribers on farmer-owned lines who plan to dismantle their facilities and become regular subscribers of the borrower as soon as service is available. The completed system will consist of 270 miles of line.

Howard K. Culbertson is president and manager of the Sterling company.

* * *

St. Stephen (S. C.) Telephone Co. on Feb. 4 was extended a loan of $204,000 to finance the extension and improvement of rural telephone service in Berkeley County. With these loan funds, the borrower plans to cut over the present common battery and magneto system, serving 238 subscribers, to dial operation, and add facilities to serve 246 additional subscribers. About 64 miles of new line will be constructed, 22 miles rebuilt, and a new combination headquarters automatic central office constructed at St. Stephen. The completed system will consist of 90 miles of line.

G. W. Keller is president and F. O. Baxter is manager of the St. Stephen Telephone Co.

Working With People

By GILBERT R. BRACKETT

PART V

BEFORE YOUR PEOPLE will listen to you, you must be able to prove to them that you are more proficient than they are. You must impress upon them that you can do more to help them in their work than can anyone else.

Most of us respect ourselves more than does anyone else. In fact, we respect ourselves so much we can't see any need for a change. What we probably need most of all are a few rough treatments which will show us what duds we really are.

Generally, criticism hurts and angers. Whether it is constructive or not, some people feel it isn't necessary, it isn't fair, and they are confident they can do just as well without it. But how wrong they are. They need criticism; we all need criticism. Even when it's vindictive and unearned, it's a privilege and an opportunity. Otherwise, how could we know ourselves or correct our faults.

The really big person welcomes criticism. It's only the little fellow who can't be wrong. And remember this, you'll never get the cooperation and help from anyone until you know his hidden story.

The petty or nagging kind of criticism is as worthless as is the tactless correction. It just makes people mad, even though it may be the truth, and does more harm than good.

If it is necessary to criticize one of our people we should make certain our remarks will not be overheard. "Bawling out" a person within the hearing of others can result in serious morale deflection in your force.

Give your people credit for their good work and you'll find that they'll accept correction more willingly. They will know you not only are aware of their faults but will recognize their good points as well.

About the only time we really take criticism with aplomb is when we are paying for it . . . like a golf lesson. Ordinarily we go on the defensive and manufacture excuses. We imagine ourselves different. We say we don't object to constructive criticism but we are a rare individual and it would be a rare occasion if we did not resent it . . . it's just human nature.

A person must have pride in his industry, if he is to do good work and enjoy his job. In the end, it will pay us big dividends in happy employes and self-satisfaction if we keep from criticizing our people impulsively. We must search diligently for means of correcting our people without hurt to their pride.

Our objective, as telephone people, is to give our customers accurate, dependable, fast and courteous service. We as supervisors have an added responsibility . . . that of fair treatment of the people under our supervision.

Could we withdraw all supervision and meet our service objectives? Of course we couldn't. Most of our people realize they need some help. They welcome assistance at times. They want to be helped but they can object to some of the methods we may use.

Get this clearly fixed in your people's minds that in all kinds of work, inspection takes place. We know that in a service organization like ours we cannot examine our product leisurely at a later date. It is necessary to observe the work while it is being performed. Have you ever made this clear to the people you supervise?

Criticism is a harsh word. It suggests fault-finding, although that is not the general intent of the word. But if we'll remember the following things, we should have little negative reaction from the people we supervise:

(1) Before we criticize what is faulty, we'll try to get results by praising what is good.

(2) If we are quick to criticize, if we get satisfaction out of doing it, watch out! We're headed in the wrong direction.

(3) If we dislike criticizing others, fine. When we do have to correct, we'll do it by suggesting.

(4) We'll overlook the occasional slip and won't talk about petty, unimportant things.

(5) We'll explain new practices and methods clearly and give reasons for them.

There are some supervisors who look only for what is wrong. What a drab life they must live. They get little enjoyment out of the job and become decidedly unpopular as well. Our job is a happy and pleasant one when we look for opportunities to praise our coworkers. Really it shouldn't be difficult to find something about which we can compliment — a person is neat, he's quick to learn, he's always on time, he's pleasant, smiling, etc.

It isn't necessary to overdo the commending job, but we need have little fear for anyone getting the "swelled head" if we are truthful and sincere. If a compliment is deserved and if it is sincerely given, it is very much worthwhile. But don't compliment an undeserving person.

Certainly you'll meet people who don't feel that compliments are necessary. You'll also run into people who do not react rightly to praise. But these fellows are the exception, not the rule.

On most jobs there is a shortage of appreciation and praise. It is handed out meagerly and miserly, as though giving it were a sign of weakness. Everyone appreciates praise, from apprentice to president. The average person looks for it. That is why praise can be one of your most important tools you have to work with. In his heart even your most confirmed old "crab" covets a bit of praise. It's just human nature.

While we have no proof, we believe you'll agree that far more time is spent on "what is wrong" than on "what is right." Some say, if the job is done correctly why spend time on it? Is it because we spend so much time and pay so much attention to what is wrong that we give such good service? We are supposed to do our work correctly. Should we have to be patted on the back for doing the right thing?

Truly there is the rare person who seemingly just isn't interested in being told how well he is doing, but thank

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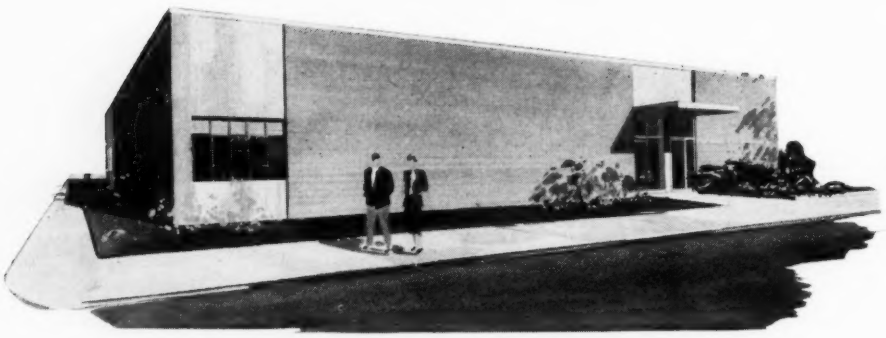


Central office building now under construction for the Ohio Consolidated Telephone Co. Located in Portsmouth, O., the building will cost less than $1.00 per cubic foot. Construction is of reinforced concrete with face brick and concrete block back-up.

Low-Cost Telephone Buildings

By FRED SEVALD*

IN THESE DAYS of ever-increasing building costs, it is perhaps no wonder that our mail occasionally brings inquiries from telephone people who want to know "the secret." What they are referring to, of course, is the fact that the cost of a number of Smith, Hinchman & Grylls-designed telephone buildings has run under $1.00 per cubic foot.

But there is nothing magical about the low cost of these buildings—no secret building methods, no miraculous new building materials were used in their construction.

But as an architectural-engineering firm with half a century of experience in the telephone building field, we have learned and applied a large number of clear-cut, money saving procedures.

Over the past 50 years, Smith, Hinchman & Grylls has designed about 120 telephone projects in Michigan alone. This work—most of it for the Michigan Bell Telephone Co.—has encompassed almost every type of telephone structure. These range in size from simple unattended Community Dial Office buildings, to large, complex structures housing millions of dollars worth of automatic equipment.

The low cost of many of our telephone projects can be credited largely to the excellent cooperation received from the Michigan Bell Telephone Co. Having been associated closely for many years with that company's building and equipment engineering staffs, Smith, Hinchman & Grylls has developed a practical working knowledge of the nature of telephone equipment and its building requirements, both as to construction and maintenance.

Getting down to cases, perhaps the most important factor involves the careful selection of materials. Most telephone buildings are, after all, only enclosures for the equipment within. A sound structural enclosure can be designed without incorporating expensive materials into the construction. In some cases, cinder or concrete block construction is perfectly adequate and, properly used, is just as sound structurally and architecturally.

The elimination of ornamentation also contributes to low building cost. Cut stone trim and elaborate architectural metal work aren't necessary to achieve smart design. By properly relating the simplest and fewest building materials, it is possible to produce a clean, functional and attractive building—for considerably less money than is often spent for buildings of this nature.

It is not only necessary to select the least expensive building materials, but also those requiring the least number of skilled trades. For instance, when it is feasible to use cinder block or brick with cinder block back-up for walls, only two building trades (masonry and painting) are involved. Compare this to the number of trades involved in constructing and finishing a conventional wall: Masons, lathers, plasterers and painters.

The liberal use of expensive materials and special details for the decoration of entrances, lobbies and public areas is a common extra expense. The client who has never before employed the services of a profcssional architectural firm will sometimes expect these areas to be as imposing as a hotel lobby. If he will listen with an open mind to his architect, he will learn that warm, dramatic architectural designs can be created without the use of ornate or expensive materials.

But specifying economical material is only half the job. Buildings housing different kinds of telephone equipment need different kinds of construction. For instance, an automatic equipment office building requires windows only for esthetic or psychological reasons, while an automatic message accounting center—which is primarily an office building—needs maximum daylight.

Material short-cuts aren't always economical. Above all, the architect or engineer should be familiar with telephone building requirements. There is nothing economical about a building which does not provide a proper enclosure and consequently jeopardizes the operation of thousands of dollars worth of delicate equipment. Since telephone buildings are a "specialty" building, it's a good idea to hire an architect with experience in the field.

*Mr. Sevald is Telephone Project Director of Smith, Hinchman & Grylls, Inc., Detroit architects-engineers.

The design planning of telephone buildings should take in more than present-day economical considerations. For instance, all telephone buildings designed by Smith, Hinchman & Grylls are planned with an economical eye to the future. At the outset of a project, studies are made showing possible future vertical and horizontal additions; the ultimate as well as the initial appearance of the building is known at the project's inception; expansion can be undertaken without costly changes in the structure of the existing building and without ruining the architecture with unplanned "patch" additions.

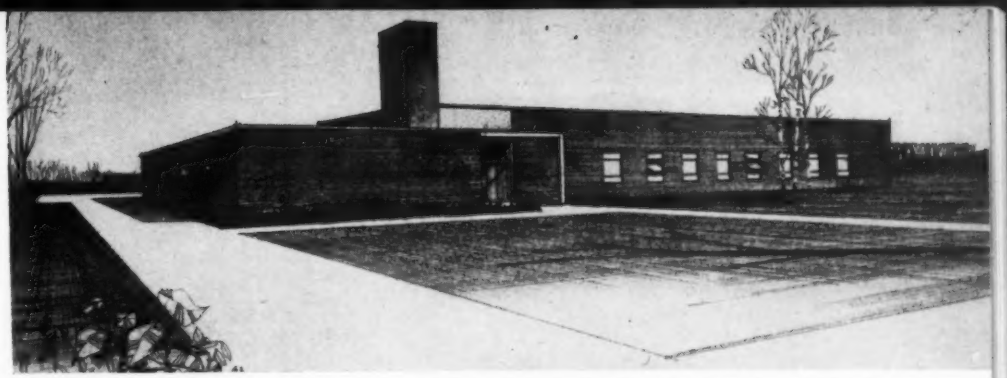
With today's high construction costs, it is more important than ever for the client to make sure that he is getting the maximum value for building-dollar spent. With the evolution of ever more efficient and ever more complex telephone equipment, the building's mechanical and electrical requirements (special ventilating, air conditioning, etc.) have become more involved and, therefore, more expensive. Very often, with a fixed construction budget, the client must choose between adequate provision for mechanical and electrical needs and elaborating the design of the building.

There are several firm rules that should be helpful to a company thinking about building or expanding telephone housing:

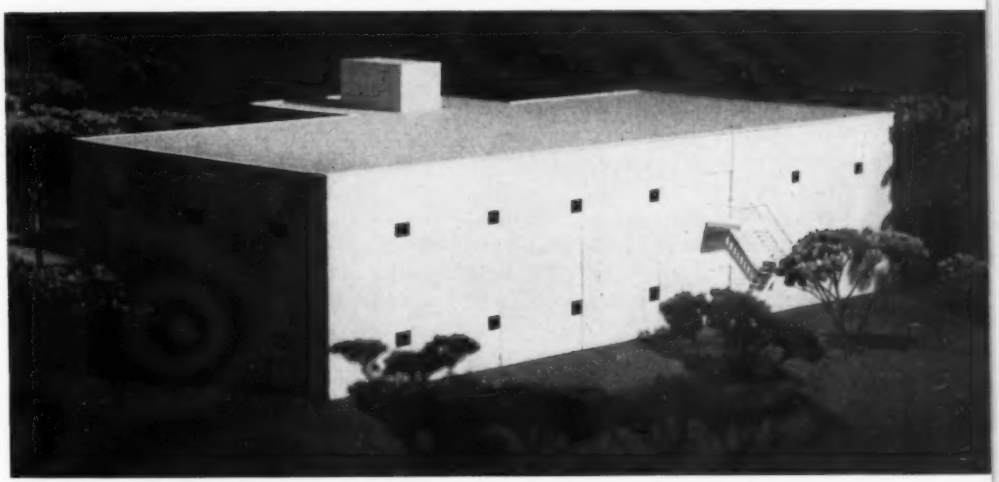
(1) Make sure first of all that the architect or architectural firm you are considering has recognized professional status. Among architects, membership in the American Institute of Architects (AIA) is generally considered proof of competence.

(2) Since the design and engineering of telephone buildings often entails solving special technical problems, choose an architect (when possible) with experience in the field. This is not to imply that a qualified architect or architectural firm without telephone experience can't do a creditable job. But chances are that an experienced firm will often prove more satisfactory both as to the time required to prepare the plans and specifications, the supervision of construction and the finished result.

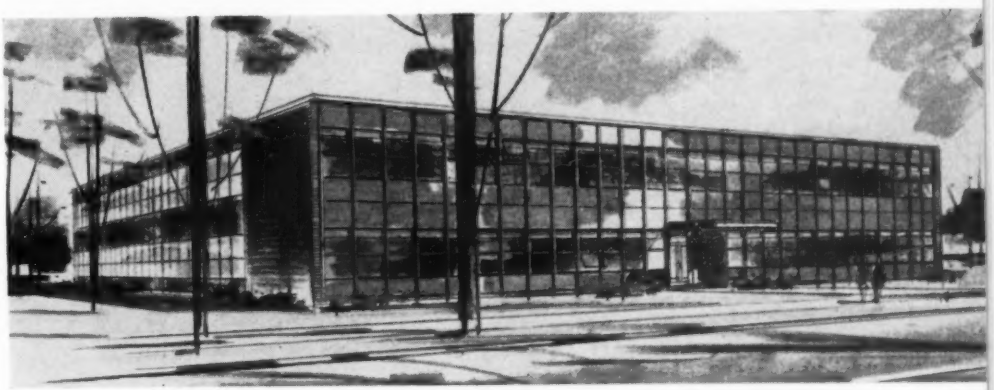
(3) Don't expect "economical miracles" simply because you've hired a qualified architect. The cost of your building depends not only on the materials used to construct it, but also upon the special needs of your company. The best way to obtain good, economical building is to give your architect the priceless advantage of working with a client with an open mind.



This central office building in Trenton, Mich., will cost considerably less than $1.00 per cubic foot. Only 60 days elapsed between the time preliminary drawings were begun and the ground-breaking.



One of the country's first blast-resistant structures is scheduled for completion early next year. This new central office building of Michigan Bell Telephone Co. is located near Detroit. It is designed to be completely independent of outside utilities in the event of atomic attack.



Scheduled to be completed soon, a new automatic message accounting building at Port Huron, Mich., will be the second installation in the country equipped with a new type of electronic accounting and billing equipment.

Twenty-story main Michigan Bell Building in downtown Detroit. A portion of it can be seen at left. In 1953 an eight-story annex was added (center). The new structure houses automatic equipment, engineering and general offices.

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Bell Develops New Tube to Transmit Long Distance Conversations

A NEW AND RADICALLY different medium for transmitting telephone and television conversations over long distances has been used successfully in experiments, Bell Telephone Laboratories announced on Feb. 3.

The new medium, a long distance waveguide, is markedly different from modern cable or radio-relay systems—it uses hollow metallic tubes roughly two inches in diameter.

Bell scientists believe the new waveguide may someday simultaneously carry tens of thousands of cross-country telephone conversations along with hundreds of television programs. Top capacity for the most modern of coaxial systems is 1,860 two-way telephone conversations or 600 such telephone conversations and two TV programs simultaneously on a pair of coaxial tubes. Modern coaxial cables have eight such tubes, two of which are kept as spares for emergencies.

Waveguides made of solid tubing—roughly like a metal water pipe—have been widely used for some time for short distances. It would be possible to use these solid metal tubes for long distances if they were perfectly straight, but this is impractical.

The new long distance waveguide is also a hollow tube, but it is constructed of a thin copper wire, very tightly coiled—like a spring under pressure—and wrapped inside a flexible outer coating which holds the coiled wire in place. This type need not be straight and can actually carry signals around corners.

This hose-like tube is the Bell Laboratories' new long distance waveguide, a radically different means for transmitting conversations.

Experiments indicate that both the solid tube type waveguide and the new coiled wire or "helical" type of waveguide can be used together in communications systems, the first for short distances and the latter for long distances.

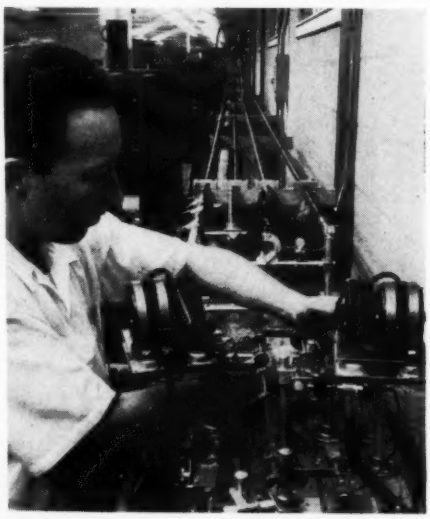
Recent experiments at Bell's Holmdel, N. J., laboratory indicate that the new waveguide transmission is extremely promising and might, when fully developed, join coaxial cable and radio-relay as an everyday transmission medium for the Bell System. Engineers hope to use the new waveguide in a variety of ways; one of these might be with a heavy protective coating so that the hollow tubes are run underground.

That hollow tube being held by a Bell Telephone Laboratories engineer is the newest look in telephone and television transmission.

Although this new form of transmission is still in the experimental stage, a recent long distance test was made at Holmdel in a copper pipe 500 feet long. Engineers bounced signals back and forth in the tube for distances of 40 miles. They calculated that in comparison, the same waves could have traveled only 12 miles in a coaxial cable with the same loss in strength.

The new transmission system operates in a frequency range so high that it has never before been put to practical use for communications. As a matter of fact, this range is so high that engineers do not have a name for it yet although the short waves used are known as millimeter waves. The "super high" frequency range established by the Federal Communications Commission goes up to 30,000 megacycles. The carrier frequency for the new waveguide is about 50,000 megacycles.

A major difference between transmission through the new waveguide and through previous systems is that the higher the frequency in the waveguide, the less the loss through attenuation. This is exactly the reverse of other forms of transmission.



A Bell Telephone Laboratories engineer tests transmission through long distance waveguides of various sizes at Holmdel, N. J.

Studies of waveguides have been in progress at the Bell Laboratories for nearly a quarter of a century. In 1932, a fundamental experiment demonstrated that electric waves could flow through a hollow tube for several hundred feet and this was the foundation for later development work in this field. A store of mathematical knowledge was built up and scientists studied many tubes in different shapes and of different materials.

This early knowledge was applied by Bell Laboratories in the development of radar during World War II when waveguides were used to funnel radar signals from an antenna to receiving equipment. Similar waveguides and others of a more advanced design are now in use in the Bell System to carry signals on microwave radio-relay towers. Some of these, as well as the new long distance waveguide, are round.

Beyond the prospect of an improved transmission with the long distance waveguide is the possibility of learning how to use tiny wave lengths on the order of one millimeter, about a 25th of an inch. If this should become possible, the waveguide of the future may be no thicker than a fountain pen and still carry tens of thousands of telephone messages.

The OPERATOR'S CORNER

by MAYME WORKMAN, Traffic Editor

TOLL TRAFFIC routes is always an interesting and pertinent subject in the traffic department, a subject which should be expounded occasionally, so that we may not lose sight of its importance.

Proper routings are necessary to facilitate the handling of toll traffic. The provision of one or several circuits either in a group or sequence enables a long distance operator to quickly establish a satisfactory connection between the calling and the called telephones.

To assure a satisfactory connection, prescribed routings must be adhered to. A satisfactory connection is one which can be promptly and easily established and which will enable the parties involved to carry on a conversation that can be readily understood. In other words, transmission must be satisfactory.

From an economy standpoint, circuits cannot be provided on a no-delay basis which would mean "a circuit always available when a call is placed." The provision of circuits on such a basis would involve a very heavy financial outlay for both circuit and central office equipment which would be all out of proportion to the revenue received. By injecting a reasonable delay in the circuit provision for the busy hour traffic, this situation is overcome and to a large extent the necessity of increasing toll rates is avoided. It is expected that NC conditions will be encountered on a small percentage of the busy hour traffic.

There is a real need for authorized routes. If operators were permitted to use any route at their own discretion, calls would be going over routes without regard to load or transmission conditions. This would be detrimental to the customer's service, as in many cases a satisfactory connection would not be obtained. Many routings would be congested, resulting in delay in the completion of calls, as well as operator's time that could be used to better advantage in completing calls and keeping toll traffic flowing. Authorized routes should be used without deviation except for possible emergency reasons.

The following are reasons why routes should be authorized and used by operators accordingly:

(1) To control the speed of service to given points.

(2) To control transmission on these calls.

(3) To conserve operator and circuit holding time.

(4) To keep loads balanced over all routes thereby avoiding excessive NC conditions over some routes and idle conditions over others.

(5) To enable the traffic department to make accurate studies or checks on the use of circuits required to handle the traffic without encountering excessive NC conditions.

(6) To avoid complaints of service delays due to inability to reach the terminating point without making several attempts.

Toll routes must be maintained at the proper standard of efficiency at all times. Periodic checks should be made by the traffic department as to the adequacy of the circuit group to move the traffic in a reasonably satisfactory manner during busy hours.

Excessive busy hour usage results generally in a high percentage of NC conditions encountered with a correspondingly high percentage of customers released. Such a condition is not a satisfactory one from a service or a customer's viewpoint. Recommendations should be made for such additional circuits as will relieve the condition.

There are times when due to emergencies or when certain temporary conditions arise which make changes in routing directions a necessity, approval of the chief operator is all that should be necessary for the use of another route to clear up such temporary conditions. It is recommended that the chief operator contact the chief operator of the other offices involved on the temporary routes to explain what she has done and why and also to secure the co-operation of the other offices in handling the situation.

Consideration should be given to the possible provision of an alternate route when, from studies or observations, it is apparent that relief of some kind is necessary for a circuit group. There are instances where an alternate route —usually a one switch—has available time that could well be used to handle the overflow of a direct circuit group. It is desirable to make a check of the situation periodically to see that the loads and speed of service over direct and alternate routes are reasonably well balanced. Where alternate routes are provided, they are only to be used when all direct circuits are in use or where a possible OD condition exists resulting in all circuits in a direct group being BY or OD or a combination of both.

It is the chief operator's responsibility to see that trouble experienced by the operating force on any route is promptly reported to the proper department so that it can be cleared without delay. Chronic conditions existing should be reported to her superior.

All of the foregoing, if carefully followed out, will tend to improve toll routings and will result in a better completion of toll traffic. Public relations will also improve as a result of this action.

Traffic Questions

(1) What is a proper traffic route?

(2) What is considered as a satisfactory toll connection?

(3) Are authorized routings necessary?

(4) What classes of routings are usually provided?

(5) Who is permitted to establish an Emergency or Temporary route?

Answers are presented on page 45.

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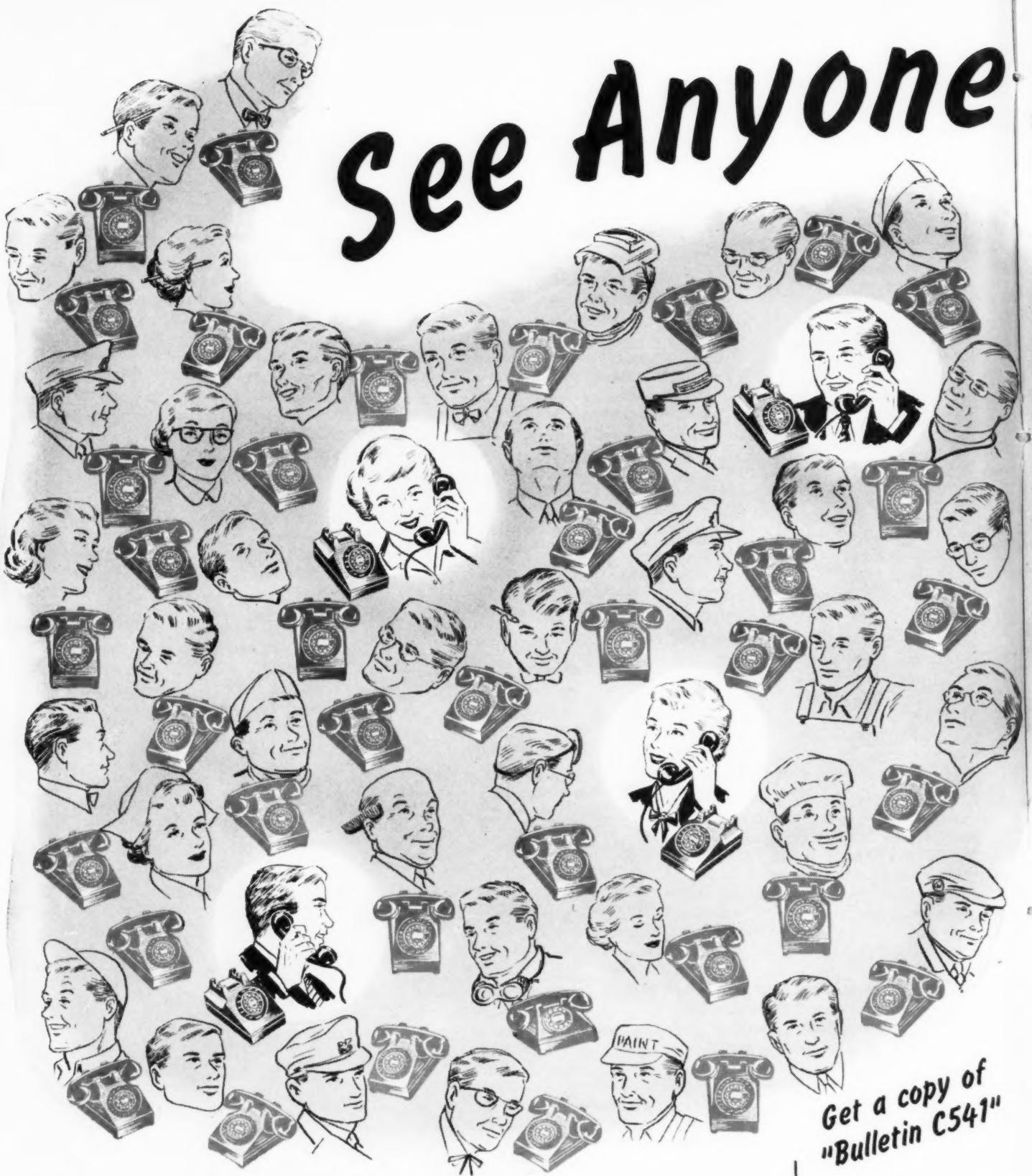
See Anyone



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THE PLANT MAN'S Notebook

by Ray Blain, Technical Editor

IN THE LANDING of submarine cable it has been the custom for years to use empty oil drums to float it from the ship to the shore. The cable ship will proceed toward the shore until the water gets too shallow for it to float. The cable, with the oil drums attached at certain intervals, is then pulled into a landing. This relieves the strain on the cable for if it were pulled along the bottom, the strain involved might injure the cable.

Oil drums are rather expensive and the number involved usually require considerable storage space on the cable ship. These drums will carry a weight of 300 to 400 pounds each. When the cable is in place with the end anchored on shore, much time is required to recover the oil drums and replace them on the cable ship. Because of the high cost of operating the average cable ship, the recovery time for these oil drums will usually represent an appreciable amount of money.

The modern arrangement is to make use of inflated neoprene balloons instead of oil drums to float cable to shore. These balloons cost from $5.00 to $6.00 each when procured in large numbers and they do not require a large storage space on shipboard. They will support about 200 pounds each and for this reason they must be attached at shorter intervals than oil drums along the cable to float it.

These balloons may be recovered and deflated for reuse or they may be abandoned in place if this practice proves more economical. If abandoned, the balloons may be punctured by a rifle from a distance. The time available for landing a cable may be limited by action of the tides and in such a case, puncturing the balloons with a rifle may prove highly desirable.

• • •

The uses that may be made of a small personal telephone directory are amazing. This directory lists frequently-called numbers and may be carried in the billfold or card case. One small card typed on both sides will accommodate about 50 telephone numbers which is more than the number frequently called by the average individual.

• • •

Of general communication interest is a vital new use of radar in ground combat to detect and track down the source of enemy fire, which was announced recently by the Department of the Army. Known as counter-mortar radar AN/MPQ-10, the device was

U. S. Army photo.

jointly developed and designed by the U. S. Army Signal Corps and the Sperry Gyroscope Co. Early production samples were first flown direct from the factory to Korean battlefields in December, 1952.

With the aid of this new electronic locator, front line forces can detect and "lock on" the path of enemy mortar shells, automatically track their trajectory, and reveal the enemy position. This equipment is compact and mobile and can be towed by a light Army truck for quick movement in battle.

• • •

We are indebted to George Hamburger, of the Washington, D. C., office of the Copperweld Steel Co., for information on a new and simple device designed for the driving of sectional ground rods for use in deep grounding.

This device is essentially a lightweight tripod constructed of high-strength aluminum alloy and standard 1¼-inch pipe. The tripod supports a Barco gasoline-operated hammer suspended by a block and tackle that is used to drive the ground rods. Rods in either 4 or 8-foot sections may be driven by this device. The tripod, being light, may be handled easily by one man. It may also be dissembled and loaded into a small space for transporting from one job to another.

To drive a rod, the tripod is first set up and the Barco hammer elevated by the use of the block and tackle to the required height. The coupling is tightly screwed on to the unpointed end of the first section of rod. The driving bolt is screwed into the top end of the coupling. The Barco hammer is then used to drive the first section to the ground line. The driving bolt is removed from the coupling, and the second section of rod screwed into the coupling.

Another coupling is then placed on the top end of the second section, the driving rod is inserted as before, and the driving continued. This practice may be repeated until the ground rod has reached the desired depth.

The tripod and the Barco gasoline-operated hammer makes this usually difficult job a comparatively simple task.

• • •

A final check of the records of the Wire and Cable Symposium, held at Asbury Park, N. J., last December, and sponsored by the Signal Corps Engineering Laboratories, indicated the following:

This year's registration totaled 562, of which 462 represented 183 commercial companies and 100 represented 17 governmental activities. Included in this registration were industrial representatives from Australia, France,

England, and Canada, and military personnel representing France, England and Canada.

• • •

Your writer certainly appreciated the hundreds of Christmas greetings received from friends and telephone acquaintances throughout the world. We have tried to answer them all, but if we have missed anyone, we want them to know that their messages were received and appreciated.

• • •

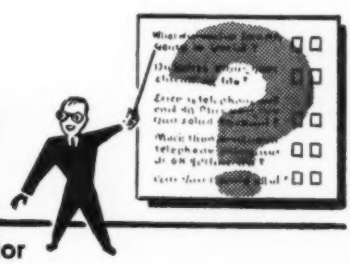
We have a report of one operating telephone company that purchases vitamins wholesale and then sells them at half-price to all employes who will agree to take them regularly. It is also understood that lost time due to sickness, especially colds in the winter, has been much less for the group of employes who have taken their vitamins regularly.

• • •

Television station KWTV, in Oklahoma City, has a tower 1,572 feet in height. This, it is claimed, is higher than anything in Texas. Television station WBAP, Dallas, is 1,113 feet high. The Empire State Building is 1,472 feet, and the Eiffel Tower 984 feet.

Oklahoma's KWTV will have 316,000 watts of power and with this antenna height should certainly have wide coverage.

PLANT MAN'S QUIZ



by RAY BLAIN, Technical Editor

Q. How often must water be added to a lead-calcium type storage battery?

A. One manufacturer states that when this type of battery is operated in accordance with their recommended instructions, water addition will be required only once or twice each year. Excessive water requirements indicate overcharging and corrective action should be taken immediately.

This manufacturer states further with reference to adding water to this type of battery:

"The purity of the lead and sulphuric acid used in lead-calcium cells is of much higher standard than that used in the conventional lead-antimony cell. It follows, therefore, that the purity of the water used must be assured; otherwise, the use of distilled water is advisable.

"Never fill above the correct high level mark. By the same token, do not allow the levels to drop below the low level mark. The rubber container types are equipped with a floating target. As long as the green shows, levels are OK. The correct high level is just where the red begins to show as the float rises in the tube."

• • •

Q. Will you please explain the network used in the new 500-type telephone?

A. This network actually comprises the basic telephone circuit. The unit consists of the induction coil, four capacitors, three resistors and two varistors in a rectangular metal case with a moulded terminal plate.

The network contains the transmission circuit elements for an anti-sidetone telephone set, including the sidetone balancing network and also the varistors which provide transmission equalization for varying loop lengths. The network case also contains the ringer capacitor, the dial radio interference suppression filter, and the telephone set terminal block.

• • •

Q. We wonder whether it will be possible to place an old aerial cable distribution plant under constant gas pressure; also whether the use of gas pressure will extend materially the useful life of a cable plant?

A. Your question is extremely difficult to answer because of the many variables involved. In the first place, the present condition of your plant must be considered. To make it gas-tight, all sheath openings—large and small—must be repaired. Dams of some type must be placed at all cable terminals to make them gas-tight.

This may prove to be an extremely expensive operation. However, the proper use of new leak detection methods may make this job easier and less costly.

There is no doubt that placing a cable distribution system under constant gas pressure will greatly extend its useful service life. The only question is whether the cost will prove to be economical.

There are probably some cases in which replacement of the cable plant will prove more economical. The average estimated life of lead-covered aerial cable is generally about 25 or 30 years. For years, engineers have been working in an effort to double the expected life of the cable plant. Perhaps the use of constant gas pressure may make this dream come true and prove an economy.

• • •

Q. Please tell us how the small automatic exchange will be able to meet the universal 2-5 numbering plan at a reasonable cost?

A. It is true that many of the small exchanges will be faced with the problem of using seven digits when normally only four or five digits would be required. This problem may be solved in some exchanges by the use of a special "2-5" switch which is a selector that "absorbs" from seven-digit numbers those digits not required for actual switching purposes.

In any case, digit absorption is the answer and this may be accomplished in various ways, depending on local conditions.

• • •

Q. We'd like to know if sleet loading will seriously affect the operation of the new type six-pair rural distribution cable. Will it be necessary to trim trees in order to clear this type of cable?

A. Because this cable is comparatively new, we have received very few reports to date on its actual use in the field. However, because of its light weight and high tensile strength, no serious trouble is expected from sleet loading.

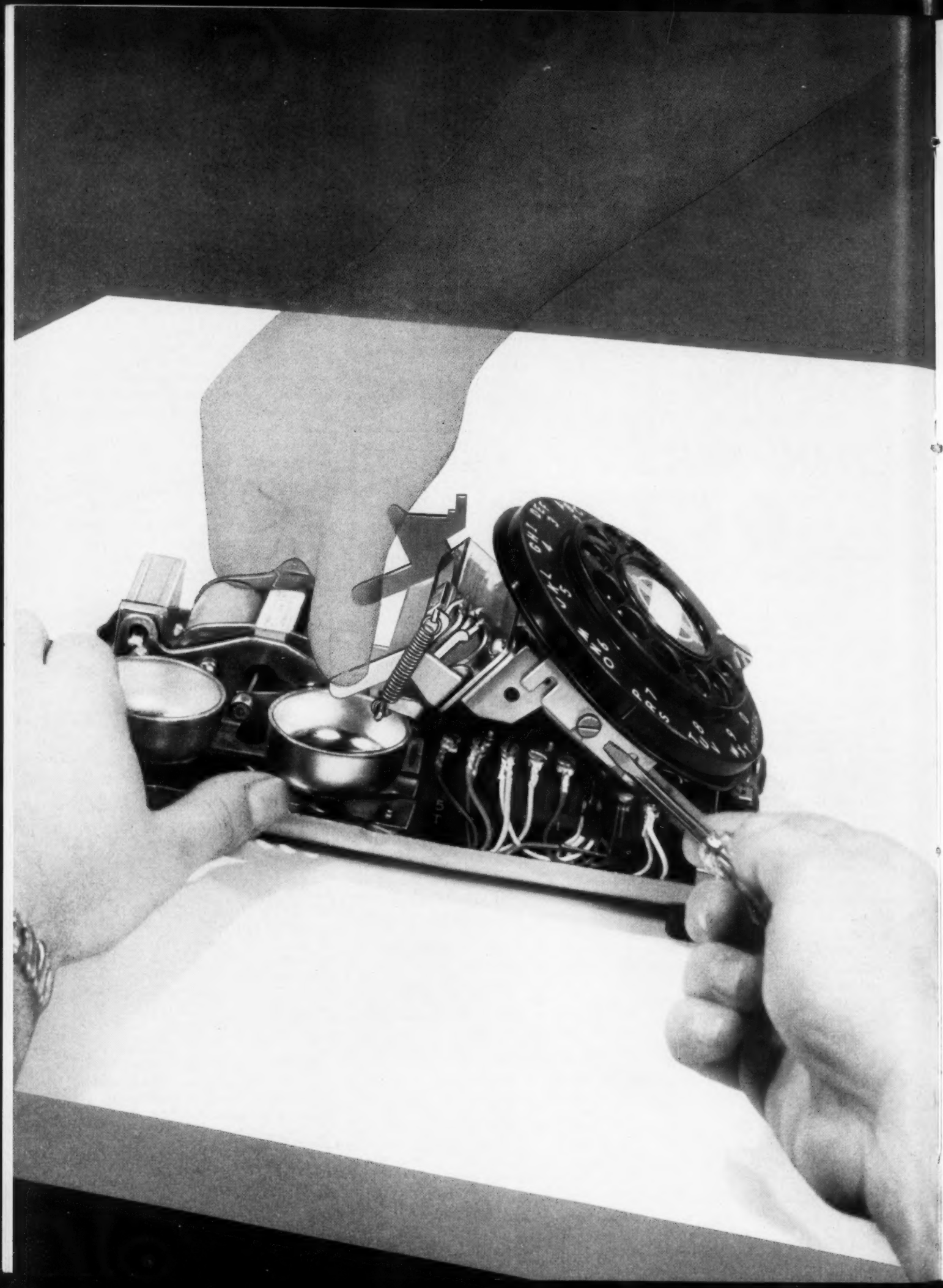
Tree interference should be avoided on all types of lines, wherever possible. It is believed, though, that because of the tough plastic insulation used on this type of rural distribution cable, it should have a high resistance to tree abrasion.

• • •

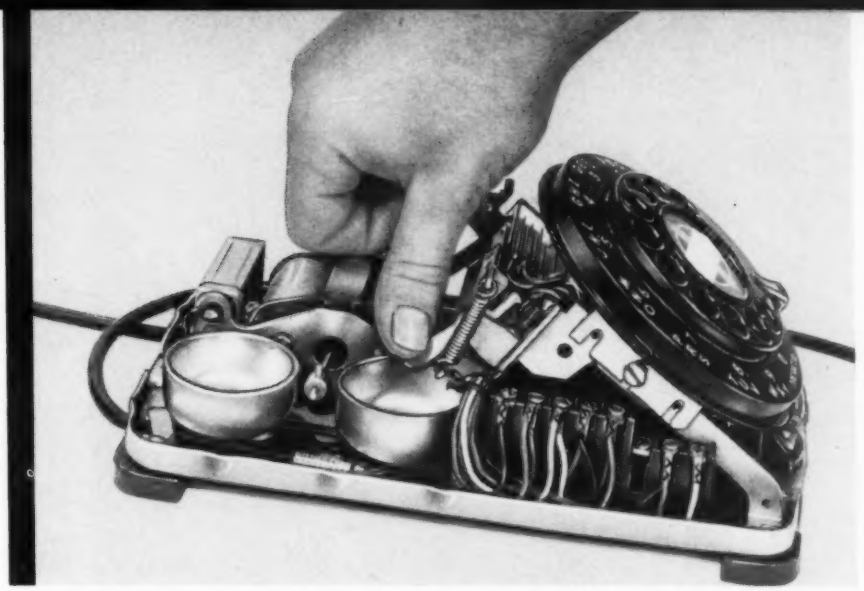
Q. What is the L-3 carrier system?

A. This is a new Bell System carrier system that makes it possible for two tubes in a coaxial cable to carry 1,800 telephone conversations simultaneously, or 600 conversations plus one television program. This first of these new carrier systems was placed in operation between New York and Philadelphia in early 1953.

XUM



Remove. housing, press "Installer's Hooklock" and calls come in as usual. No lost toll calls. Replace housing and hookswitch restores automatically.



"Installer's Hooklock" on Type 80 Monophone provides easy way to keep hookswitch down during installation and maintenance. It's a real time- and temper-saver!

Gives your maintenance man a *"3rd hand"!*

He doesn't need to hold down the hook when installing or maintaining a Type 80 Monophone. The "Installer's Hooklock" does the job—and in effect, provides him with a "third hand". He can forget the hookswitch, work faster, serve more subscribers each day.

Another reason your man gets more done faster is that Type 80 insures *simple* maintenance! Connections are made by handy spade terminals (no soldering!). Allied components, such as the ringer and the ringing condenser, are mounted as units. Twin contacts on hookswitch and dial, and a new sturdy housing all do their part to keep maintenance down. And a screwdriver is the *only* tool required!

But not only is maintenance easy, there's less of it—and that's something telephone men are approving heartily. Type 80's new moisture-sealed balancing network, new transmitter and receiver capsules, and new line compensation adjustment make transmission something to write home about. Send for Circular 1841—read all about Type 80's fine transmission, and see its beautiful styling. Order Type 80 Monophones today. *Address: Automatic Electric Sales Corporation, 1033 W. Van Buren St., Chicago 7.*

Type 80 Monophone the Telephone you Designed

AUTOMATIC AE GD® ELECTRIC

Part of the crowd assembled for the cut-over of the Footville telephone exchange to dial. Fifth from the left is J. D. KRATZ, SR., president and general manager of the Footville Telephone Co. MRS. KRATZ, manager and secretary-treasurer of the company is at his left.

FOOTVILLE

Dial 4003

ON DEC. 16, at 12 noon the little town of Footville, Wis. was converted to dial service. Naturally this was a big day for Footville. More than that it was a high point in the long career of service to the telephone industry by J. D. Kratz Sr., president and general manager of the Footville Telephone Co.

When the insulating picks were removed from the main frame and the new 180-line Leich switchboard was cut into service, there wasn't room for another person in the switchboard room. To everybody's delight, there wasn't a single case of trouble on the switchboard or in the outside plant.

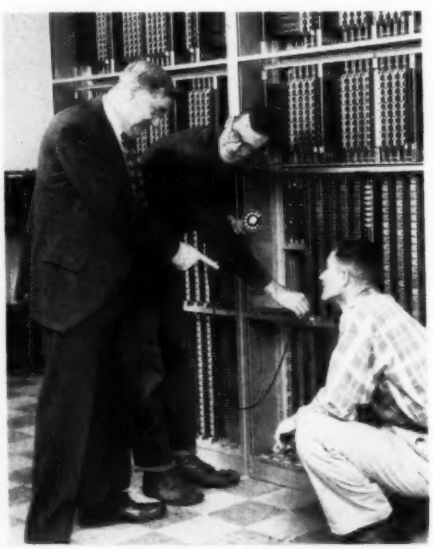
All these telephone people didn't travel many miles just to see another exchange converted to dial. They came to be with a fellow telephone man whom they loved and respected for his lifetime of interest and service in the Independent telephone industry.

Don Kratz started to work for the old Dean Electric Co. in Elyria, O. He stayed when they reorganized into the Garford Mfg. Co. and when that company was purchased by Stromberg-Carlson Co., Don stayed on to work for Stromberg-Carlson.

His knowledge and experience were well utilized when he was sent to the state of Wisconsin, first as an installer and later as a salesman. One of his main problems as a salesman was that when he stopped in for a routine call at a telephone exchange he would most likely end up spending the rest of the day and night clearing up troubles on the company's switchboard. That's the kind of man he is.

Mr. Kratz left Stromberg-Carlson in 1938 and on Jan. 1, 1939 he purchased the Footville Telephone Exchange. At that time it had 286 magneto stations. The exchange was pretty well run down. This presented no problem to Mr. Kratz who had been helping and showing other people how to improve and modernize their telephone plants. Before long he was not only running his own exchange but was also doing switchboard installation and maintenance work for other Independent telephone companies in Minnesota and Wisconsin.

In 1948, while attending the convention of the Wisconsin State Telephone Association, Mr. Kratz saw the new Leich dial system being demonstrated. This new type of dial switchboard equipment intrigued him. He got a job as a salesman for the Leich Sales Corp.



The month before the cut-over, the Footville switchboard was installed and all lines had been thoroughly tested. Here DON KRATZ proudly explains his new system to W. L. SNIDER and JOHN DOHERTY, linemen for the Footville Telephone Co.

in the state of Wisconsin. He helped many telephone companies in that state with their plans for dial conversion.

Don was able to do this because his wife, Pauline, was manager and secretary-treasurer of the Footville Telephone Co. She did a wonderful job of running the telephone company while Don was traveling the state. In 1949, Don installed a new common battery switchboard and converted all the telephones in the village to common battery operation. In 1951, he began a program of converting all the rural lines to common battery service. This, of course, necessitated rebuilding the whole outside plant.

In April of 1954 the Footville Telephone Co. filed application with the Wisconsin Public Service Commission for authority to convert to dial service. A 16 foot x 24 foot frame building, covered with asbestos shingles and fully insulated, was finished by July 1. It is heated by thermostatically controlled electric heaters which are built into the walls. This novel heating arrangement is quite adequate and makes for a cleaner exchange than most other types of heat.

The switchboard was installed and, weeks before the cut-over, all lines had been tested several times.

They speak of families in the telephone business. The Don Kratz family is 100 per cent telephone folks. Mrs. Kratz is almost as well known throughout the state as her husband.

Don's son, J. D. Kratz Jr., follows in his father's footsteps. He lives in Footville and has his own switchboard repair, maintenance and installation company. He has done work for com-

(Please turn to page 49)

WORKING WITH PEOPLE

Concluded from page 19

goodness these fellows are as scarce as trees on a continental toll lead. Most everyone needs encouragement. If they are to persevere, they need to be commended for good work. That is how you can build pride and satisfaction in a well-done job.

It doesn't take much time to tell a person he is doing his work well and that is one reason for doing the telling. While it takes much longer to make suggestions toward work improvement, it is time well spent. We still must train and develop our people to do their work as nearly perfect as possible.

When we praise our people we should be sincere; we should phrase the compliment carefully; we should never exaggerate; we should have variety in the way we express the praise.

Let's be sure to say what we mean—be specific. It's one thing to tell a person his technique is perfect, but something different to tell him his work is perfect.

Let's really go to work on commending our people. We'll have our ups and downs to be sure. Not all compliments will react as we would like them to, but let's keep it up. We may be surprised at the results. Remember, everyone needs to be encouraged to persevere.

V V

General of California Places New Bond Issue

General Telephone Co. of California, Santa Monica, sold its new issue of 3⅜ per cent mortgage bonds to the Equitable Securities syndicate at a bid of 101.893, it was reported on Feb. 9 (TELEPHONY, Jan. 29, p. 32). Four other bids for the same rate ranged from 101.82 to 101.72. The syndicate includes:

Blair & Co., Inc.
Drexel & Co.
Baxter, Williams & Co.
Central Republic Co., Inc.
William Blair & Co.
Cooley & Co.
New York Hanseatic Corp.
William E. Pollock & Co., Inc.
Burnham & Co.
Kormendi & Co., Inc.
De Haven & Townsend, Crouter & Bodine
Emanuel, Deetjen & Co.
Scott, Horner & Mason, Inc.

V V

>> It has been said that a big man is not one who makes no mistakes, but one who is bigger than any mistake he makes.

PLP

PREFORMED PRODUCTS for self-supporting telephone cable

PLASTIC insulated wires within a jacket are proving to have definite electrical and economical advantages. However, this thermoplastic insulation must not be subjected to concentrated stresses. Ordinary support fittings are not suitable for this type of cable. THE ANSWER: PLP Dead-Ends and Tangent Support Line Guards used as shown above protect while firmly holding cable in an elongated grip, in which the unit pressure is small because of the large area of the gripping surface. For details of their exclusive advantages, ask your Distributor or write us for Descriptive and Technical Data.

PLP

PREFORMED LINE PRODUCTS COMPANY
5349 St. Clair Avenue • Cleveland 3, Ohio

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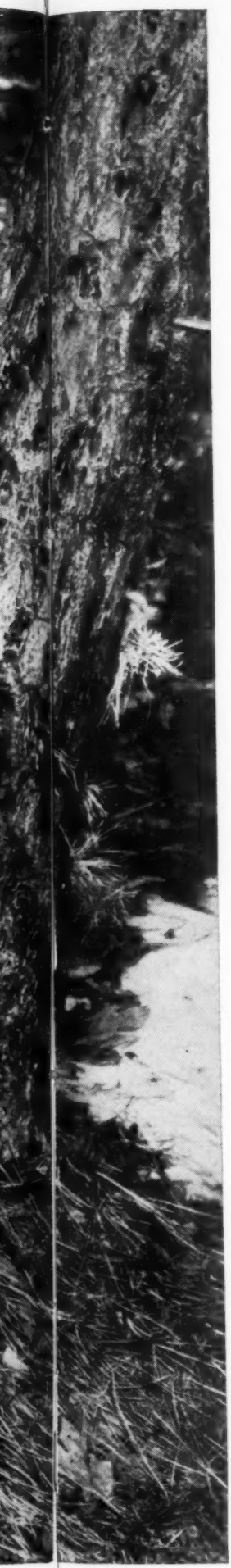
U.S.ARMY PHOTOGRAPH



Conversation piece for Uncle Sam

When the Signal Corps came to Western Electric and Bell Laboratories with ideas for a new field telephone set, we gladly put at their disposal all of our development and production know-how.

Naturally, this new set had to be really rugged. And you can bet it is. Weighing but 8½ pounds, it can take the pounding of heavy artillery shock waves, yet transmit a whisper. It works in temperatures from 40° below zero to 130° above — can even be dunked in water without damage.

This improved set can talk 20 to 30% further than the old set on just a pair of flashlight batteries. Without batteries — even with the transmitter damaged — the soldier can talk up to five miles by speaking into the receiver.

To meet varied combat conditions, there's a new "woodpecker" signal that can be adjusted from a barely audible level to a clatter that cuts through battle noise. Another new feature is the tapered handset which fits easily under a helmet.

Everybody has heard how progressive telephone technology has been applied to national defense weaponry — radar, guided missile systems, and so on — but it should be remembered that technological progress is also being made in the less dramatic but equally important field of telephone communications systems for our Armed Forces.

Western Electric

MANUFACTURING AND SUPPLY UNIT OF THE BELL SYSTEM

XUM

construction and maintenance DIGEST

- **Splice in a trice**
- **Die-hard battery**
- **Protection plus**
- **Money-go-round**
- **Real cool sitting**

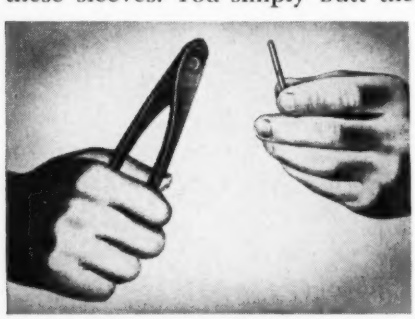
Published every week to help you get the most out of your materials and supplies dollar

The few dollars you spend on *reliable* equipment today will be repaid a hundredfold in lower maintenance costs for years to come. Protect your investment with the double guarantee offered by Stromberg-Carlson. First, leading manufacturers build this equipment, and guarantee it. Second, because we recommend and sell this equipment to the telephone industry, we *also* guarantee its performance!

Splice it fast . . . and it stays fast

Here's how to make a quick splice that holds fast, even under the most intense vibration. In fact, your splice will outlast the conductor!

You need two items; a Nicopress sleeve, and the Nicopress tool that is designed especially for use with these sleeves. You simply butt the



This Nicopress 17-2 tool plus this Nicopress sleeve make better pair splices, faster.

bared wire ends together inside the sleeve, and you've got a joint that won't ever pull out! Quick and easy.

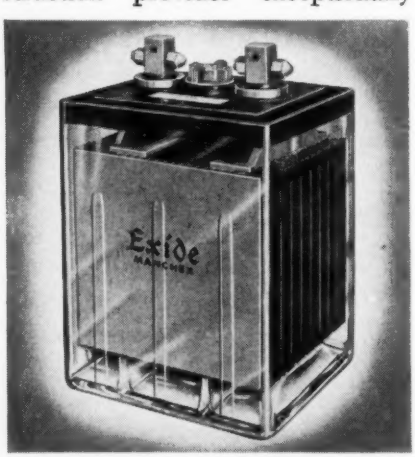
The alloy lining inside the sleeve is harder than either the conductor or the sleeve, and forms a joint that is stronger than the rated breaking strength of the wire itself. **And** it has a high, lasting conductivity.

Also—joints made with Nicopress sleeves are small and neat, so they may be applied on inside wires as well as outdoor lines.

Protect yourself from battery failures

You can use Exide Manchex Batteries for central office and private branch exchange equipment, and be sure you'll get a supply of power when you need it. These batteries have been proven daily in exchanges of every size, and for 67 years Exide Batteries have been serving the telephone industry.

The manchester positive plate with its exclusive button-type construction provides exceptionally



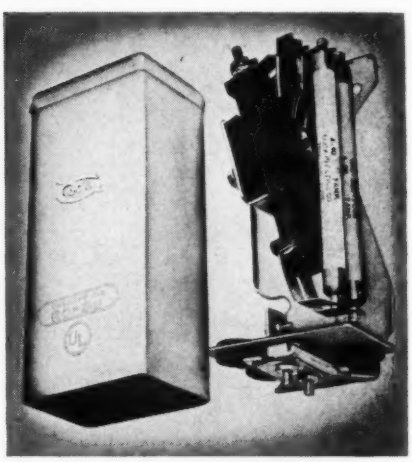
Old age, even high discharge rates, have little effect on this battery.

long life. Latest developments on molded glass jars permit compact space-saving installation.

Heavy terminal posts with copper inserts provide extra conductivity for sustained voltage at high discharge rates. Microporous rubber along with slotted plastic separators, are impervious to chemical and electrical reactions. Plastic spacers assure plate alignment.

The Cook RO-9U sub-station protector

Protection plus—that's Cook Electric Company's type RO-9U substation protector.



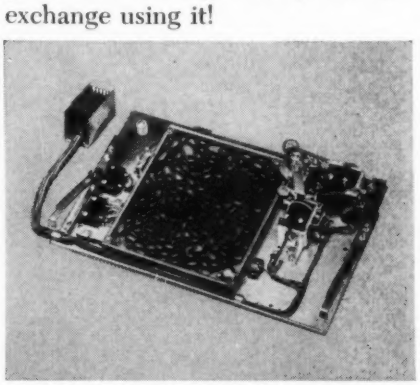
The most highly protective substation protector available.

This rugged unit consists of a heavy Bakelite base, two 7-amp. ceramic fuses, two famous Tru-Gap dischargers and two secondary dischargers which will ground a fault current when the fuses blow. These are all mounted on a sturdy steel bracket and covered with a heavy gauge, weathertight, zinc hood.

For the best in fused sub-station protectors, order the RO-9U.

The money goes 'round and 'round

Yes—when the magnetic tape inside this XY® toll ticketing trunk recorder goes around inside the glass, it's making money for the exchange using it!



Completely accurate and completely unattended, the recorder

"listens in" on toll calls and picks up all the facts. Later, at a predetermined time and still without human attendance, it feeds its information into a playback which, in turn, activates printing equipment to produce either tickets or punched cards.

If you have toll problems in your future, investigate XY toll recording right away.

Cane-seat chair keeps operators cool, comfortable

Making the operator as comfortable as possible may not strike you as a "maintenance" problem – yet your service is much smoother when the girls are cool and relaxed.

This operator's chair has a cane seat, which is much cooler, cleaner and more comfortable than other types. It retains all the posture advantages for which Sturgis is famed. It is called the Sturgis SC-240.

The posture-curved, well-cushioned backrest is covered in genuine leather.

The exclusive Sturgis "Follow-Flex" feature automatically adjusts to the operator's every movement, supports her restfully all the time, discourages fatigue, keeps her at top efficiency.

Other new and welcome features include a plastic-coated steel foot ring which retains its color, and a handy purse holder, available on request. Six seat heights, all adjustable.

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IN THE NATION'S CAPITAL

Continued from page 18

firmed to membership on a regulatory commission because he was too solicitous about the rights of the consumers. But actually it was the revelation of Olds' left-wing ideological background (which many years ago had included writings for Communist magazines) which caused the Senators balk on confirming him in 1950. If anything additional were needed to indicate that the former FPC chairman does not even believe in permanent regulation of private utility enterprise, but rather in a substitution of publicly owned utility services, the foregoing quotation and the general pattern of Olds' activities would seem to answer the question.

Putting Olds on a regulatory commission to administer a system (of continuing private enterprise in the utility business) in which he obviously has no ultimate belief or confidence, would be like making a superintendent of schools out of somebody who does not believe in education.

Of course a lot of people think that a distinction can be made between public ownership of power and the socializing of private business generally. But the best witness against that ought to be America's long respected and honestly socialistic Norman Thomas—many times candidate of the Socialist Party for presidency of the United States. Just a few weeks ago, writing in the *Newark Star-Ledger*, Mr. Thomas made a very simple but intelligent comment on the naïveté of those who try to distinguish between socializing electricity and any other kind of socialism. Mr. Thomas said: "The advocacy of public power does not itself make a Socialist, or the practice of it constitute a full program of socialism. But, of course, the principle behind public development of power is socialistic, and it is rather childish to deny it." Certainly Norman Thomas, of all people, ought to be able to recognize socialism when he sees it. But Senator Douglas, who has had a streak of it in his own background, seems to have developed a little color-blindness on pink proposals for public ownership.

Pay-as-You-See TV Deferred

The Federal Communications Commission has decided to put off, for the present, a threatened showdown on whether there ought to be such a thing as subscription television. The FCC turned down the application of Zenith Radio Corp. for the right to begin immediately commercial operation of "pay-as-you-see" television service.

The commission explained the whole idea of television viewers paying a subscription fee for service licensed under the Federal Communications Act was so important that it should not be decided on the basis of an individual company's application. Instead, the FCC said it "should be considered in a general rule-making proceeding in which all phases of the problem may be afforded detailed and careful consideration." Therefore it thought that it was not proper at this time to pass on the request of the Zenith corporation.

Several other firms have applied for permits to introduce commercial subscription TV in the homes by methods other than Zenith's. In each of the several methods a "scrambled" signal is broadcast. Subscribers to Zenith's "phonevision" method would have a line from the telephone company which plugs into their set. During subscription broadcasts the telephone line rings a tone into the set which causes a special device to "unscramble" the picture.

Another method under construction is the "subscriber-vision" method developed by Skiatron Electronic & Television Corp. of New York City. This method uses a perforated card which is sold to subscribers who insert it into their set to unscramble the picture.

A third system, authorized by the FCC for experimentation only, is "telemeter" which was granted Paramount Television Products, Inc. Tests are being run from station KTLA in Los Angeles. Subscribers pay for the service by depositing coins in a meter on their receivers.

There are several petitions now before the commission that urge authorization of subscription TV. They urge that programs available under subscription TV would enable ultra-high-frequency stations and non-network stations to compete with the very-high frequency stations and network affiliates for a larger share of the television audience. Petitioners' sky field tests of "fee-TV" show it is technically possible and that the public would be willing to make the proposed payments to receive high quality programs.

The FCC said it must look into questions of law and fact. The legal questions involve whether the FCC has authority to authorize and regulate subscription TV and whether fee-TV is "broadcasting" as defined in the Communications Act.

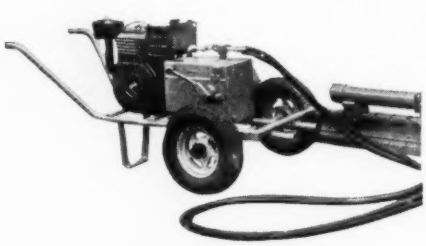
Voice of America via Telephone

The headquarters of the Voice of

XUM

"Pipe installation time and labor costs cut about 50% with Greenlee Pipe Pusher"

That's what a leading eastern utility reports as its experience with a GREENLEE Pipe Pusher on jobs as shown above. Let this remarkable tool make big timesavings and reduce job costs for you, too. With the GREENLEE Pusher, *one* man pushes pipe *under* streets, walks, floors, railways, lawns, etc. Eliminates extensive trenching and time-consuming tearing up, tunneling, backfilling, repaving. Often pays for itself on the first few jobs. Two models: No. 790 for pushing ¾" to 4" pipe; No. 795 for larger pipe and concrete ducts.



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America — official propaganda agency of the Unted States to the rest of the world—recently moved from New York City to Washington. This move was made at the direction of Congress to permit closer co-ordination of the radio and TV "Voice's" services with the rest of the U. S. Information Agency and other departments of the government. In the process, the telephone has become an important link in coordinating the system-wide operations of the "Voice." The move started last spring and was completed last November.

The Washington, D. C., facilities of the Voice include 14 studios, 10 recording rooms with equipment to make 40 discs or tapes simultaneously, 10 tape-editing booths, a recording control center, and the master control room. The remainder of the nearly 100,000 square feet in the Health, Education, and Welfare Building is devoted to editorial offices, music and transcription libraries, and other offices required to keep the Voice in operation 24 hours a day.

The master control is the technical heart of the broadcasting facilities, feeding the programs *via telephone lines to 30 shortwave transmitters in the United States.* The control console, to be installed next spring, will be capable of selecting program material from any one of 100 sources and handling 26 separate programs simultaneously. Until completion of the Washington control board, the Voice is feeding programs to the old board in New York and from it to the transmitters. The highly complex electronic equipment at the Washington headquarters involves more than half a million electrical connections and nearly 100 miles of cable.

The Voice has a network of 78 transmitters, including 30 shortwave stations in the U. S. which are operated for the Voice by private broadcasting companies. Government-owned and -controlled relay stations are located at Salonika, Greece; Tangier, Ceylon, Honolulu, Munich, the Philippines, and Okinawa. The latter three have million-watt transmitters—the world's most powerful known broadcasting facilities.

To provide Voice of America (VOA) with a mobile and flexible relay station to combat Soviet jamming, the VOA has a floating broadcasting station, the U. S. Coast Guard Cutter Courier. Relay facilities are also leased from British Broadcasting Corp. in England and other relays or rebroadcasts are made through arrangement with local broadcasters of France, Italy, Germany, Austria, Switzerland, Trieste, Greece, Belgian Congo, Viet Nam, Japan, Korea, The Philippines, Formosa, and Latin America.

The Voice's daily program includes 30½ hours of direct broadcasts and 64 hours of repeat programs from overseas relay bases in the following languages: Albanian, Armenian, Bulgarian, Czech and Slovak, English, Estonian, French, Georgian, German to Austria, German to Germany, Hungarian, Italian, Latvian, Lithuanian, Polish, Rumanian, Russian, Serbo-Croat, Slovene, Spanish, Ukrainian, Amoy, Burmese, Cantonese, Indonesian, Japanese, Korean, Mandarin, Thai, Vietnamese, Arabic, Bengali, Greek, Hindi, Persian, Tamil, Turkish, and Urdu.

This includes six and one-half hours of daily broadcasts to the U. S. S. R. and Soviet-controlled areas. To counter Soviet jamming, these programs are recorded at overseas relay bases and repeated on short, medium, and long wave.

Voice broadcasts consist of news, news analyses, and features, which include political commentaries, press reviews, round-table discussions, documentaries, and special events. Although the breakdown varies from day to day, the program content in general is evenly balanced between news and features.

V V

Employ Paystation "Office" To Defraud Loan Companies

Oakland, Cal., police held two men on Feb. 6 on charges that they had "buncoed" at least three loan companies out of nearly $1,000 by giving each other glowing references from telephone booth "offices."

The two were arrested in Sacramento while trying to float a new "loan" with a finance company office there. According to police, one was trying to make the loan, while the other, in a bus depot telephone booth, was waiting to make a good reference for his partner.

V V

Two Oregon Cooperatives File Articles

The Oregon Corporation Department has received the articles of incorporation of the Line No. 32 Telephone Co., Ione (on Jan. 24), and of the Ione-Gooseberry Telephone Co., Ione (on Jan. 21).

Incorporators of the Line No. 32 co-op are: Pat C. Doherty, Earl McCabe, John Proudfoot, Lloyd Morgan and Ralph Crum; and of the Ione-Gooseberry cooperative: Berl Akers, Charles Carlson, Lewis Halvorsen, Wallace Matthews and Raymond Lundell.

REA Loan Applications, Allocations and Funds Advanced by States

LOAN ALLOCATIONS[2]—CUMULATIVE TOTALS

AREA[1]	Applications on Hand as of Dec. 31, 1954	Number of Borrowers		Total Amount		FUNDS ADVANCED TO BORROWERS	
		June 30, 1954	Dec. 31, 1954	June 30, 1954	Dec. 31, 1954	June 30, 1954	Dec. 31, 1954
United States..	$51,027,369	279	309	$184,578,542	$208,646,542	$60,102,148	$79,153,962
Alabama	710,000	9	9	8,873,000	8,873,000	1,660,255	2,645,977
Arizona	0	1	1	351,000	351,000	0	0
Arkansas	120,000	2	2	642,000	936,000	49,058	277,764
California	415,000	2	2	943,000	943,000	157,122	461,376
Colorado	1,353,000	3	3	919,000	927,000	188,959	209,990
Connecticut ...	0	0	0	0	0	0	0
Delaware	0	0	0	0	0	0	0
Florida	850,000	3	4	1,169,000	4,771,000	1,077,964	1,148,587
Georgia	2,772,000	12	16	5,297,000	7,180,000	2,432,196	2,919,062
Idaho	561,000	3	4	1,397,000	1,521,000	270,460	385,935
Illinois	7,019,000	10	14	7,291,132	8,979,132	1,144,317	1,955,882
Indiana	1,023,049	13	12	6,502,192	6,474,192	2,747,482	3,000,296
Iowa	450,000	7	10	2,767,000	3,922,000	1,816,332	2,091,525
Kansas	1,785,000	18	22	9,767,000	12,226,000	1,915,337	2,709,101
Kentucky	2,554,000	11	11	10,204,000	10,865,000	2,960,237	3,931,536
Louisiana	814,000	11	13	6,463,000	7,431,000	3,899,745	4,533,796
Maine	1,220,000	1	2	124,000	711,000	60,598	94,876
Maryland	0	0	0	0	0	0	0
Massachusetts..	0	1	1	165,000	165,000	0	0
Michigan	200,000	6	5	2,469,000	2,310,000	1,205,037	1,411,887
Minnesota	1,556,220	22	22	14,555,000	15,544,000	4,522,128	6,209,452
Mississippi	0	4	4	1,973,000	1,973,000	1,487,492	1,552,422
Missouri	3,322,000	6	8	6,739,000	7,564,000	1,252,301	1,797,639
Montana	1,500,000	6	7	6,219,000	6,707,000	634,488	2,070,174
Nebraska	963,000	1	1	637,000	637,000	71,824	91,252
Nevada	0	1	1	416,000	416,000	215,048	359,513
New Hampshire	0	0	0	0	0	0	0
New Jersey	0	1	1	1,232,000	1,232,000	813,178	892,037
New Mexico ...	0	3	3	2,175,000	2,300,000	1,575,288	1,576,313
New York	0	2	2	481,000	481,000	121,790	121,790
North Carolina.	760,000	10	10	7,811,000	7,863,000	2,928,717	3,703,655
North Dakota..	5,859,000	11	11	13,149,000	18,094,000	2,195,025	3,289,105
Ohio	0	1	1	150,000	150,000	56,195	92,452
Oklahoma	1,575,000	5	6	1,826,000	2,052,000	871,924	1,031,521
Oregon	270,000	4	5	2,175,000	2,428,000	934,215	1,737,572
Pennsylvania ..	1,791,000	1	1	114,000	114,000	0	0
Rhode Island ..	0	0	0	0	0	0	0
South Carolina.	1,575,000	10	11	8,871,000	9,081,000	1,938,363	3,399,747
South Dakota..	1,743,800	9	11	7,310,000	7,676,000	764,841	1,350,459
Tennessee	1,237,000	13	13	10,337,000	10,830,000	4,403,809	5,828,951
Texas	1,561,000	26	27	18,799,218	19,241,218	9,152,091	10,582,046
Utah	90,000	4	4	1,780,000	1,830,000	1,266,664	1,302,007
Vermont	150,000	0	0	0	0	0	0
Virginia	569,000	7	7	3,011,000	3,011,000	244,116	469,403
Washington ...	395,000	5	7	4,405,000	5,122,000	1,168,745	1,675,401
West Virginia..	300,000	2	2	677,000	677,000	267,978	276,465
Wisconsin	1,521,000	10	10	3,992,000	4,070,000	1,613,290	1,894,671
Wyoming	363,300	2	2	401,000	401,000	17,539	72,325
Alaska	2,080,000	0	1	0	567,000	0	0
Virgin Islands..	0	0	0	0	0	0	0
Puerto Rico ...	0	0	0	0	0	0	0

[1]State figures represent data for REA borrowers incorporated within the state.

[2]Cumulative net loan allocations (rescissions deducted). Includes amounts not yet under loan contract.

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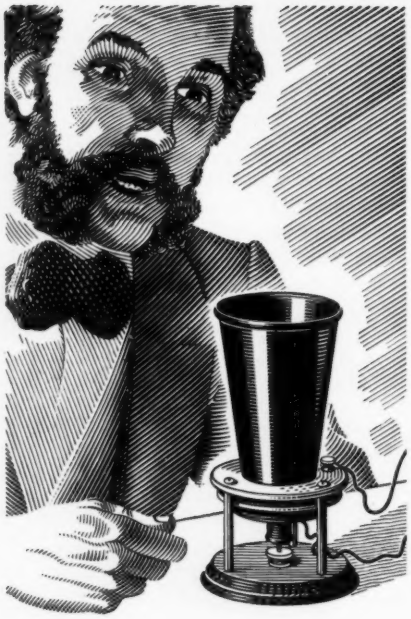

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N. Y. Bell and Two Independents Combine to Restore Service

Telephone service will once again be provided in the Long Eddy, N. Y., area, formerly served by the Delaware & Sullivan Telephone Co. which ceased operations in July, 1954 (TELEPHONY, Aug. 28, p. 36).

Arrangements have been made after consultations between the New York Public Service Commission, the New York Telephone Co. and two Independent telephone companies, to re-establish telephone service.

According to Harold H. Heider, a New York Telephone Co. manager, the company hopes to be able to restore service by the middle of 1955. Meanwhile, Heider said, the company will continue its emergency program that has provided telephone service since July 17 through the use of public telephones in Long Eddy, Hankins, Fremont Center, and Mileses.

The telephone company was able to introduce emergency service by converting for public telephone use its long distance lines between Callicoon and the Long Eddy area.

V V

North Carolina Independent Asks Authority to Raise Rates

The Monroe Telephone Co. asked the North Carolina Utilities Commission on Feb. 8 for authority to increase its rates $36,435 a year, declaring that the additional revenue is needed to enable it to earn a reasonable return on its investment in new facilities.

The company recently converted to dial operation and issued $600,000 worth of bonds and additional stock to pay the cost.

Monroe residence subscribers now pay $3.35 for one-party service, $2.60 for two-party service, $2.35 for four-party service and $2.00 for rural, multi-party service. Under the proposed new schedule the rates would be increased to $4.60, $3.60, $2.75 and $2.50.

Business subscribers now pay $5.25, $4.75, $4.25 and $3.50. If the new rates proposed by the company are approved, the rates will go to $7.50, $6.00, $5.00 and $4.25.

V V

Minn. Company to Buy Another

The Minnesota Railroad and Warehouse Commission on Jan. 27 authorized the Crow Wing Cooperative Rural Telephone Co., Brainerd, to purchase the Rail Prairie Rosing Telephone Co.

V V

Texas Co-op and 18 Subscribers Settle Dispute Over Charges

A group of Hale County, Tex., farmers and the South Plains Telephone Cooperative, Inc., Lubbock, Tex., made an agreed settlement of a year-long case, in 64th District Court in Lubbock recently.

The case was filed by W. A. Painter et al vs. the South Plains Telephone Cooperative, Inc.

The farmers will get restoration of telephone service after a suspension of 11 months and will not have to pay a $50 charge which set off the dispute leading to the court case. The farmers, residents of the west part of Hale County, waived claims to damages.

The controversy arose about a year ago when the telephone cooperative assessed subscribers of the Edmonson Telephone Exchange a $50 service charge soon after the cooperative purchased the system from T. A. Singer of Dimmitt. The Edmonson exchange included approximately 30 subscribers.

Practically all of the more than 30 subscribers reportedly objected to paying the fee. The result was that all who refused to pay the fee had their telephones disconnected, according to the complaints of the plaintiffs.

Eventually all except 18 of the customers paid the $50 charge and their telephone service was restored. It was the 18 holdouts who saw the case through the trial and appeals courts.

The court ordered the telephone cooperative to begin restoration of service and to have all telephones in good working order by Jan. 15.

In the early stages of the legal procedure the telephone cooperative requested that the case be tried in Lubbock where its headquarters are located. The trial court denied this plea of privilege. The cooperative appealed to the Court of Civil Appeals in Amarillo. The appeals court judge, E. A. Bills of Littlefield, 64th District Court judge, told the cooperative's attorneys that unless they had new evidence he would have to rule in keeping with his opinions in the ruling against the plea of privilege. Counsel on the two sides then came to an agreement.

At the start of the controversy sub-

scribers maintained it was "the principal of the thing" to which they mainly objected. They argued that if they could be charged $50, they could be charged $500. The cooperative is to pay court costs.

V V

Pennsylvania Independent Sold To Local Businessmen

Ownership of the Palmerton (Pa.) Telephone Co. passed from Pennsylvania Power & Light Co. on Jan. 28 to a group of six businessmen who live in the Palmerton area, it has been reported.

New ownership is virtually the same as that of the Palmerton Television Signal Corp., operators of a community antenna.

The owners are Claude Reinhard, who will become president of the telephone company when the new owners take over, probably about Mar. 1; Charles Helmuth, vice president; Elmer Strohl, treasurer; Styles Butz, secretary; Alex Kaslik and Thomas Bogert.

Also, in connection with the acquisition of the company, an issue of $375,000 principal amount of first mortgage bonds have been sold to a large insurance company. These bonds will be secured by a first mortgage which is being placed on the property of the telephone company. In addition to the issuance of these bonds, a rearrangement of the capital structure of the Palmerton company has been completed in line with a request by the new owners.

Palmerton Telephone Co. on Jan. 28 filed with the Pennsylvania Public Utilities Commission, a proposal to register the bond issue and also to seek approval on the rearrangement of the company's capital structure.

V V

Illinois Bell Rate Case Appealed in Circuit Court

Illinois Bell Telephone Co. on Feb. 9 appealed the Jan. 15 order of the Illinois Commerce Commission which denied the company any increase in rates (TELEPHONY, Jan. 22, p. 28). The appeal was filed in the Kane County Circuit Court in Geneva, Ill.

Illinois Bell, prior to its circuit court appeal, asked the commission on Jan. 22 for a rehearing of its rate application, but this was denied (TELEPHONY, Feb. 5, p. 40).

The commission's Jan. 15 denial came 11 months after Illinois Bell asked for a $24,900,000-a-year increase. This requested increase would have netted the company $11,250,000 a year. The commission order also refused to approve toll-free, extended

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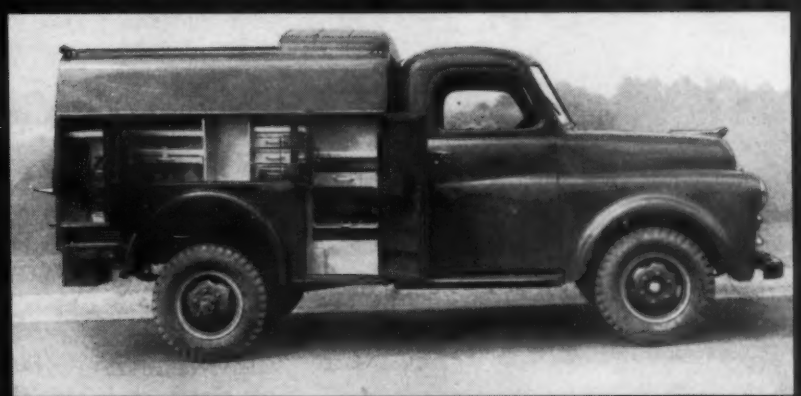

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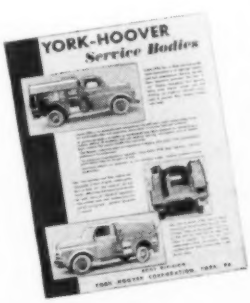

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local calling areas for most Illinois towns served by the company.

Illinois Bell has charged that the commission order contained 47 errors. These included:

Understating fair value of the company—the dollar amount on which a reasonable return should be earned. The commission increased the fair value only 41 million dollars over its last finding (in 1953) despite the fact that net original cost increased 108 million dollars and reproduction cost less depreciation went up 79 million dollars.

Fixing a lower rate of return for Illinois Bell than the commission had set for other Illinois utilities whose businesses involve lesser risk.

Failure to consider the effect of increased wage costs.

Failure to include inflation's costs to the company in determining the rates to be charged.

This is the third time since 1949 that the company has been forced to appeal commission decisions to Illinois courts.

* * *

The Illinois Supreme Court has denied the city of Chicago's request for a rehearing on the 16.5-million-dollar rate increase granted Illinois Bell, it was reported recently (TELEPHONY, Nov. 27, 1954, p. 31).

Chicago had challenged the 1953 increase in Kane County circuit court. Last November the supreme court upheld the lower court's rejection of the challenge.

V V

Missouri Woman Asks Damages For Fall Over Telephone Cord

A Moberly, Mo., woman on Feb. 10 was reported to be suing the Southwestern Bell Telephone Co. for $25,000, alleging she tripped over a telephone cord in her home, fell and suffered a fractured shoulder.

She alleged the telephone installers were negligent in not reducing the length of the cord between the telephone and the box. She said the cord was so long that it extended into a passageway between rooms of her home and that she caught her foot in the loop and fell.

V V

Oregon Commission Authorizes Loan and Stock Sale

The Public Utilities Commissioner of Oregon on Feb. 9 authorized the Nehalem Telephone & Telegraph Co. to borrow from Stromberg-Carlson Co. a sum not to exceed $72,000, and to issue its promissory note payable in 240 substantially equal monthly installments, with interest on the unpaid balance at the rate of 5¼ per cent per annum, secured by a mortgage on the applicant's utility property. Sixty-six thousand dollars of the loan are to be used to pay the cost of construction and improvement of the company's facilities, and the balance of $6,000 is to be used to refund existing indebtedness.

The commission on Feb. 7 ordered that the Oregon Telephone Corp., Mt. Vernon, may issue and sell to the public 100 shares of its no par value common stock for not less than $14.28 per share, and 60 shares of its preferred stock, par value $50 per share, for not less than $3,000, and shall use the proceeds for improvements.

V V

Ohio Commission Turns Down Rehearing Request by 13 Cities

The Ohio Public Utilities Commission has rejected a request for a rehearing of its decision to give the Ohio Bell Telephone Co. a $7,600,000 rate increase (TELEPHONY, Feb. 12, p. 38).

The commission on Jan. 31 refused the appeal for a rehearing by 13 cities. Commissioners Ray O. Martin and Ralph A. Winter favored rejection. Commission Chairman Robert L. Moulton voted for a rehearing.

A spokesman for the 13 cities battling the rate raise said they would ask the Ohio Supreme Court within the next 30 days to reverse the commission decision.

V V

W. Va. Commission Hears Rate Raise and Service Pleas

Two telephone cases were put on the West Virginia Public Service Commission docket for Jan. 17. Dunkard Valley Telephone Co., Core, is seeking authority to extend its service in Monongalia County.

Citizen Telephone Co. has a proposal pending to raise its rates to subscribers in the Grantsville and Arnoldsburg sections of Calhoun County.

V V

Ill. Company Seeks Sale OK

Stock owned by Roscoe Sloan, manager of the 4-C Telephone Co., Rankin, is being sold, according to testimony by Mr. Sloan at an Illinois Commerce Commission hearing in Springfield recently.

V V

Indiana Company Asks Raise

The Orestes Telephone Co. recently petitioned the Indiana Public Service Commission for a rate increase.

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New England T&T Authorized $5,515,000 Rate Raise in Mass.

Two orders issued late in January by the Massachusetts Department of Public Utilities (DPU) ended rate proceedings which began when New England Telephone & Telegraph Co. requested on Dec. 10, 1952, increased revenues totaling $10,200,000 per year.

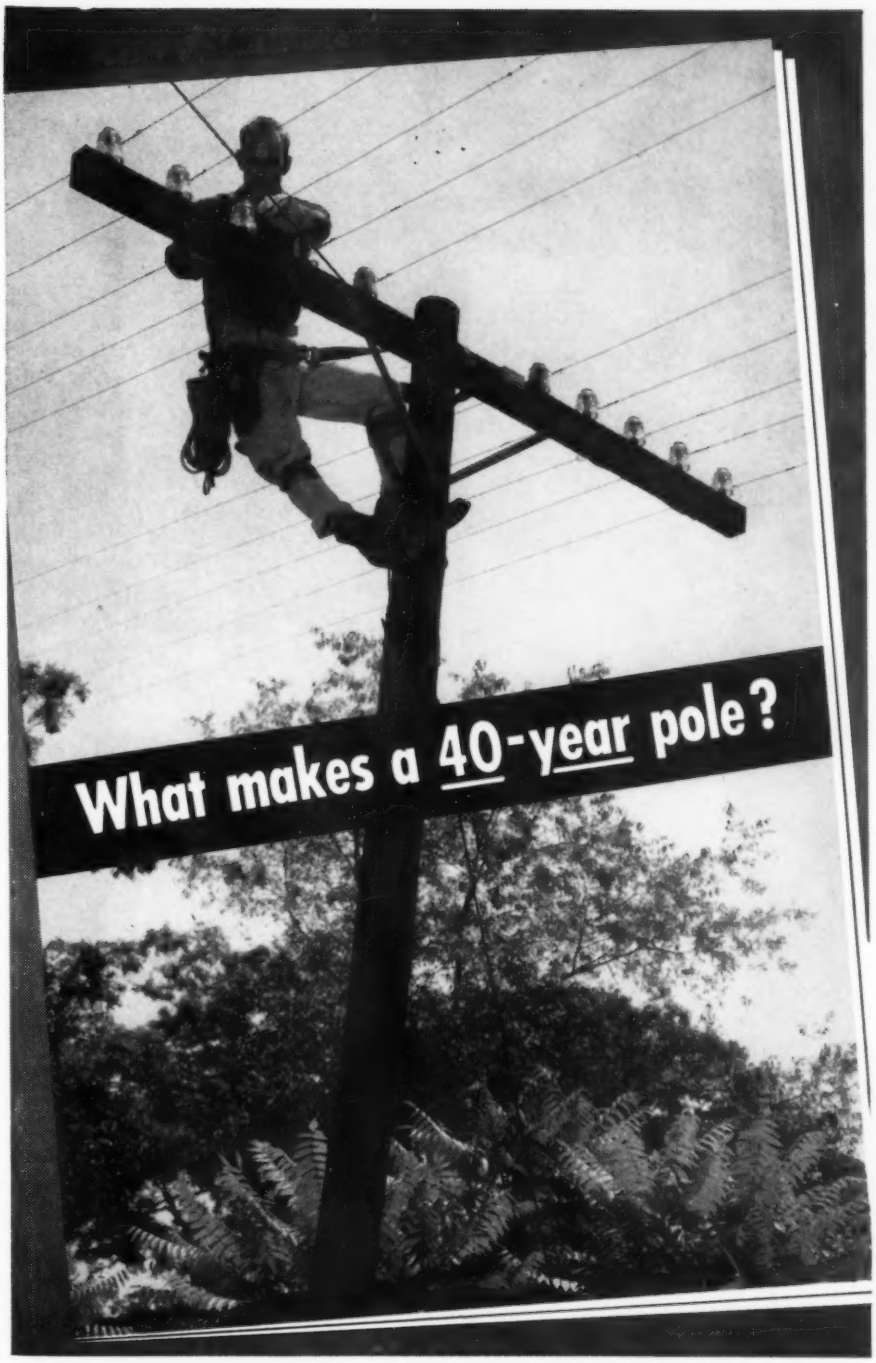
These rates became effective under bond in November, 1953, after the company appealed to the Massachusetts Supreme Judicial Court from a commission (DPU) order which had authorized an increase of only $4,590,415.

The high court remanded the case to the commission on Sept. 20, 1954, for review. After this the company petitioned the commission for a further increase of $6,500,000 per year to cover increased investment, wage increases, and hurricane expenses.

The latest orders from the commission find that the rates currently collected under bond have yielded no more than a fair return, and these have therefore been approved. The commission also found that the company, which serves all the New England states except Connecticut, is entitled to receive $2,492,000 additional, which, due to taxes, makes the gross amount required $5,515,000 in increased rates. In authorizing this additional amount the commission allowed a return of 6.25 per cent. It allowed the expense incurred for wage increases, but denied the expense associated with service restoration after the recent hurricanes. Total of increases now approved is $15,741,000.

In its opinion the high court stated that the issues before it were as follows: The company had contended that the commission's orders were confiscatory because (1) they did not permit the company to earn a reasonable return on the fair value of its property; and because (2) on the prudent investment-cost of capital theory adopted by the commission (a) the company would not earn upon its investment the predicted return of 6.313 per cent; (b) the board used a hypothetical debt ratio of 45 per cent instead of the actual ratio of 36.1 per cent in computing over-all cost of capital, and (c) the department disallowed as an expense of operation certain amounts actually paid by the company into its pension fund.

The court then found that the commission was not in error in using a rate base consisting of the net cost of plant as shown on the company's books and that it was justified in the hypothetical debt ratio referred to. It did find, however, that the commission was



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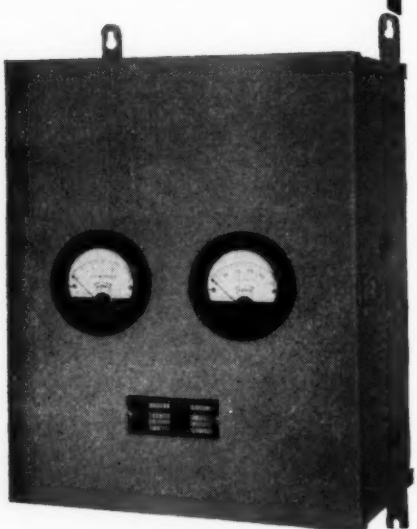

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in error in disallowing as an expense of operation a portion of the pension freezing fund payments. Beyond this, it further found that the effect of inflation upon the company's earnings was such as to require a further and current study of its operating results. So the court recommitted the case to the commission for review.

In passing on the adequacy of the company's earnings, the commission used as one approach the cost of capital to the utility. But, noted the commission, the cost of capital is not a static concept and a cost once found does not necessarily bear any relation to the cost which might be found at a later date. Above all, it was further noted, the commission did not conceive that such findings "constitute a ratchet mechanism" which would permit a subsequent increase but not a decrease. The Mass. commission continued:

"We do not believe that the court intended that we should have any less power to revise our findings as to the cost of capital in the light of intervening experience than we would have in respect to any other fact which may have occurred in the meantime. . . . Certainly we do not believe that the findings of the court at that time as to cost of capital as of 1949 (that a return of 6.23 per cent constituted a minimum permissible rate of return), binds us on a separate record made in 1953.

"Neither do we believe that the court intended that the rate of 6.313 per cent which we found to be a fair rate of return in 1953 should stand unchangeable in the course of our efforts to bring this investigation up to the current date some 18 months later.

"We believe therefore that we are required to inquire into (1) the rate of return shown to be necessary by the evidence as to the current cost of capital in order for the company to perform its functions as a public utility; (2) the amount invested by the company in utility operating plant; (3) the actual earnings of the company as nearly up to date as possible, and (4) the amount which would be required in order to enable the company to realize the required earnings over the period during which the company has been collecting rates under bond."

In its previous findings the DPU concluded that the composite cost of existing debt was 3.52 per cent; that the then present cost of additional debt would be 3.9 per cent and that the aggregate debt cost to the company at a 45 per cent ratio would be 3.64 per cent.

Shortly after the present hearings the cost of debt capital in the market declined sharply, and the present cost of additional debt is substantially under the cost of existing debt of the company. On Dec. 14, 1954, for example, the day before the later hearings began, the company sold 30 million dollars in bonds at a net cost to it to maturity of about 3.11 per cent. It plans to issue 51 million dollars more of securities before March, 1955, which it presently contemplates will be equity securities. It thus appears, the commission said, that the company could achieve a 45 per cent debt ratio within a very short time if its directors so decided. There is little prospect that the cost of debt money will materially increase up to the time when it becomes necessary to issue such additional securities. The commission found that the cost of additional debt capital to the New England company is not over 3.25 per cent and that the aggregate cost of debt capital on the basis of a 45 per cent ratio would be 3.42 per cent.

About Jan. 6, 1954, the company's stock was selling in the open market at about 116. On Jan. 21, the date of the latest commission finding, it was quoted at about 138. Dividends are still being declared at $2.00 per share per quarter. The dividend-price ratio has been profoundly affected and the stock is now selling to yield about 5.8 per cent on the dividend so being paid.

The commission pointed out that the task of arriving at a determination as to the fair cost of equity capital is made especially difficult because of the very nature of the present capital market. It has been decided that it is improper to use an historical survey of market prices in order to arrive at such cost, and, the commission stated, it is equally clear that it is not good practice to use "spot" prices because these may obtain during a single day or over a very limited period of time.

The commission declared that certainly its prescience did not extend to future stock prices. This dilemma was made the more precarious by recent market conditions which the commission did not believe gave a fair picture of the cost of equity capital even for the foreseeable future. On the other hand, it was clear to the commission that the relative strength in the company's stock market prices indicated a returning confidence in the essential soundness of the security.

However, the DPU did not believe that the best interests of the consumers warranted its so acting as to support the market prices at a level which would do more than enable the company to sell its stock at par. The commission decision stated:

"We think that conditions have so changed since our prior order in this matter that the New England company can now issue and sell stock to investors at a yield of 6 per cent which on

a dividend payout of 80 to 85 per cent and after allowance for market pressure and other factors would indicate a cost to the company of not over 8 per cent for equity capital. On the basis of the foregoing findings we now find that the current cost of capital to the New England company is 5.94 per cent arrived at by the following computation:

[redacted]

Debt capital at 3.42 per cent x 45 per cent .....equals 1.54 per cent
Equity capital at 8 per cent x 55 per cent .....equals 4.40 per cent
Over-all return ....equals 5.94 per cent

"The rate of return at which we arrive by this process we find to represent the minimum cost of capital to the company. We believe we ought to allow some margin between such minimum rate of return and our ultimate findings as to a reasonable rate of return; in other words, we do not believe that a minimum rate of return is necessarily a reasonable one.

"Accordingly we find that a reasonable rate of return to the N. E. Tel. & Tel. company on the record now before us and based on the present cost of capital would be between 5.94 per cent and 6.30 per cent.

"In our judgment and based on consideration of all the evidence presented in this case, including that offered at the prior hearing, we find that any return higher than 6.25 per cent would be unreasonably burdensome to the customers of the utility."

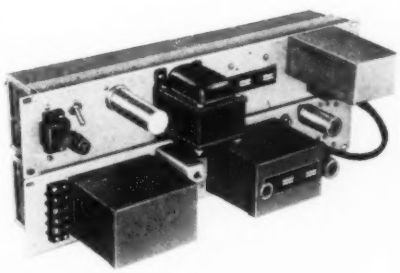
As of Sept. 30, 1954, the net investment of the company in utility operating property was stated on its books as $290,391,000. This figure is computed on the basis of gross plant in service less accrued depreciation and plus appropriate allowance for materials and supplies. The estimated comparable figure as of the end of 1954 is $298,353,000. The commission concluded that the company is living up to its commitments as to future construction and in fact had actually placed in service substantially more plant than it previously stated it was planning for 1954.

There is, however, one caveat to which attention must be directed, says the DPU finding, in using plant investment figures of this company as of any particular date. The amount of plant allocated to Massachusetts is arrived at by various formulas described in the Separations Manual. These depend upon current operating indices which in turn are in large part based on studies of toll and local traffic. Hence any distortion for any cause in the relative volumes of toll and local traffic will result in a corresponding distortion in the amount of plant assigned, as of any particular date, to intrastate operations. For this reason the company itself arrives at its aver-

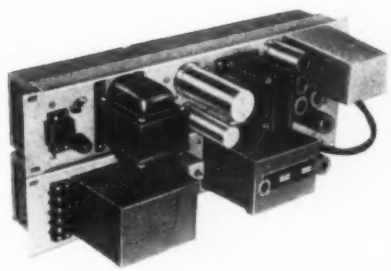
BUCKEYE CAN SHOW YOU HOW. . .

YOU CAN ADD NEW SUBSCRIBERS TO EXISTING LINES AT LOW COST

with **North's New Telephone Carrier**



Central Office Terminal



Subscriber Terminal

. . . Gives you these advantages

Provide service for waiting-list customers adjacent to lines now filled to capacity.

Reach potential customers beyond the end of present lines, without the cost of new construction to that point.

Provide private, two-party or four-party lines not now available, with resulting improvement in rate earnings.

Free physical circuits for paystations or other special revenue telephone service now blocked by lack of capacity.

Meet demands for special temporary service, such as resorts, construction camps, etc., where carrier can be moved to meet changing requirements.

Offer improved service to customers now on overcrowded lines.

Technically explained and illustrated in BULLETIN C-541

FOR FURTHER INFORMATION WRITE FOR BULLETIN C-541

BUCKEYE TELEPHONE & SUPPLY CO.

1250 KINNEAR RD. **COLUMBUS 21, OHIO**

XUM

In hand hoists—
It's Coffing

OVER 80 SIZES AND MODELS TO FILL ALL YOUR NEEDS

SPUR-GEAR HOISTS
22 models — ¼- to 25-ton

SAFETY-PULL RATCHET LEVER HOISTS
10 roller-chain models — 1,500- to 30,000-lb.
4 coil-chain models — 1,500- to 10,000-lb.

CHALLENGER LIGHTWEIGHT ALL-STEEL SPUR-GEAR HOISTS
3 models — ½-, 1-, and 2-ton

MIGHTY-MIDGET PULLERS
2 sizes—500- and 1,000-lb.

HOIST-ALLS two sizes — 1-, and 2-ton capacities

also:

EXTENDED HAND WHEEL HOISTS
6 models — ¼- to 3-ton
ARMY-TYPE HOISTS
(plain and geared)
11 models — ¼- to 10-ton
LOW HEADROOM HOISTS
12 models — 1½- to 24-ton
CLEVIS-CONNECTED HOISTS
11 models — ¼- to 10-ton
DIFFERENTIAL CHAIN HOISTS
2 sizes — ½- and 1-ton
HOIST BINDER
3,000-lb. capacity

Ask for more information on the units you need from the most complete line of hand-operated hoists. Write Dept. T2.

COFFING HOIST COMPANY
DANVILLE, ILLINOIS

age plant investment for the year by an average of the monthly figures rather than by an arithmetical average of the figure at the beginning and the end of the year.

It is clear that the company is investing very large sums of money currently in new plant, said the commission. The average net investment of the company in operating plant in service during the period Nov. 1, 1953, to Sept. 30, 1954, was $279,035,000, which the commission found to be the proper rate base for use in considering its operations over the period during which the new rates have been in effect under bond.

The commission stated that the company's actual earnings during the above period under bond resulted in a 5.61 per cent return and do most certainly not indicate any over-assessment to its customers. The company has not been collecting as a result of the rates currently in effect under bond more than it is entitled to as the result of the additional plant which has been placed in operation and the fair rate of return applicable at the present time.

V V

New Rate Schedule Authorized For Wisconsin Independent

Crandon Telephone Co. on Jan. 22 was authorized by the Wisconsin Public Service Commission to adopt a new schedule of rates. The new schedule, which will bring in an additional $2,495, took effect Feb. 1 (TELEPHONY, Nov. 13, 1954, p. 42).

The commission also said that when the company has completed 90 per cent of the work on proposed service additions, to cost $18,043, it may further increase its rates to bring in another additional amount of $803.

V V

Louisiana Commission Scheduled To Hear Rate Cases

The Louisiana Public Service Commission on Feb. 14 was scheduled to hear the following cases:

Re-hearing on the rate cases of East Ascension, Reserve and Lafourche telephone companies (TELEPHONY, Nov. 6, 1954, p. 34).

Application of the Plain Dealing Telephone Co. for authority to borrow funds from the REA and to increase rates and charges for service.

V V

>> Bell System telephones connect with about 110 countries or territories by overseas radio circuits, land lines or cables.

J. C. Crowley Jr., Minnesota Independent Leader Dies

J. C. CROWLEY JR., 78, former secretary-treasurer of the Minnesota Telephone Association and long-time leader in the Independent telephone industry, died on Feb. 6 in a St. Paul hospital.

Mr. Crowley had served as the executive officer of the Minnesota association for 30 years when he retired from that post on July 1, 1952. He continued to serve the association in a consulting capacity for several months and during the past year or so has acted as consultant to various Minnesota Independent telephone companies.

Mr. Crowley also was active in Independent telephone industry affairs nationally, having been a member of various committees of the United States Independent Telephone Association.

Mr. Crowley devoted his early boyhood and entire business career to the telephone industry—completing almost 63 years of service at the time of his death. He said at the time of his retirement that he "never made a dime outside of the telephone business."

It is quite appropriate that he spent so much of his life in the telephone industry because he was born on Aug. 15, 1876, the year Alexander Graham Bell invented the telephone.

At the age of 15 he began his telephone career when he got himself a job as water boy for $1.00 a day with the old Chicago (Ill.) Telephone Co. He was "led into" the telephone business by his father who was superintendent of the Chicago company when Crowley Jr. took on the job as water boy.

From his first telephone job, Mr. Crowley went on to laying conduit, cable splicing and installing. He began his telephone management career in 1898 when he became manager of the Eau Claire and Chippewa exchanges of the old Wisconsin Valley Telephone Co.

The following year he became associated with a contracting firm to supervise the construction of telephone plants in Duluth, Minn., and Superior, Wis. In 1901 he became superintendent of the companies operating those exchanges. He remained in this position until 1922 when he moved to St. Paul to assume the secretaryship of the Minnesota Telephone Association.

At that time the Minnesota association had as members less than 100 of the 400 Independent telephone companies operating in the state. When he retired, there were 276 Independent companies and 210 belonged to the association.

Mr. Crowley is survived by his

J. C. CROWLEY JR.

widow, Frank, of St. Paul; a daughter, Mrs. Louis Ahrens of St. Paul; a granddaughter, Mabel Lou; a sister, Mrs. Lily Murphy, and a brother, Edward.

V V

Ill. Commission Hears Cases To Sell, Operate

The Illinois Commerce Commission on Feb. 16 was to have heard the application of the Daniels Telephone Co. for permission to sell to Wabash Telephone Cooperative, Inc.

Also, on Feb. 18, the application of the Plymouth Farmers Switchboard Co. for permission to construct, operate and maintain a telephone line in the rural vicinity of Plymouth.

Answers to Traffic Questions On Page 23

(1) It is the provision of one or several circuits either in a group or sequence that will enable a long distance operator to quickly establish a satisfactory connection between the calling and the called telephones.

(2) A satisfactory toll connection is one that can be promptly and easily established and on which the parties involved are able to carry on a conversation that can be readily understood.

(3) Yes, such routings are necessary to handle toll traffic satisfactorily.

(4) Generally there are Bell routes, A.T.&T. routes and Independent routes.

(5) The chief operator.

→A Completely NEW LINE of Service Bodies with

25 FEATURES

that give a new meaning to "UTILITY"

1. Models to fit 40 different Chevrolet, Ford, International, GMC, Dodge and Studebaker chassis . . . single or dual wheel.
2. For ½ - ¾ - 1 - and 1½-ton trucks.
3. 18 different compartment arrangements.
4. Exclusive 4-point coil spring body mounting.
5. Complete line of Service Accessories.
6. Bonderized, all-steel welded construction.
7. Double lap-type joints.
8. Extra-wide doors for easy access.
9. Larger, greater capacity compartments.
10. Embossed door panels for rigidity and appearance.
11. Fully recessed door handles.
12. All doors keyed alike.
13. Tumbler-type locks at no extra cost.
14. Full bolt-action locking bar.
15. Weatherproof compartments . . . lap-seal and gutter drain on all doors.
16. Raised bottoms of all vertical compartments provide extra protection for tools and supplies.
17. Heavy-duty reinforced 16-gage bulkheads.
18. Outside compartment headers 14-gage steel.
19. 4-way, 12-gage, safety tread non-skid floor.
20. From 25 to 35 sq. feet of floor loading area.
21. Through wheel housings for universal dual wheel application.
22. Reinforced tailgate.
23. Extra strength, bridge-type construction with interlocking lateral and longitudinal reinforcements.
24. Side boxes supported by one-piece cross members, reinforced at mounting holes.
25. Beaded fender panels hinged for easy access to wheels and spring shackles.

For Better Service and Greater Utility . . . Specify

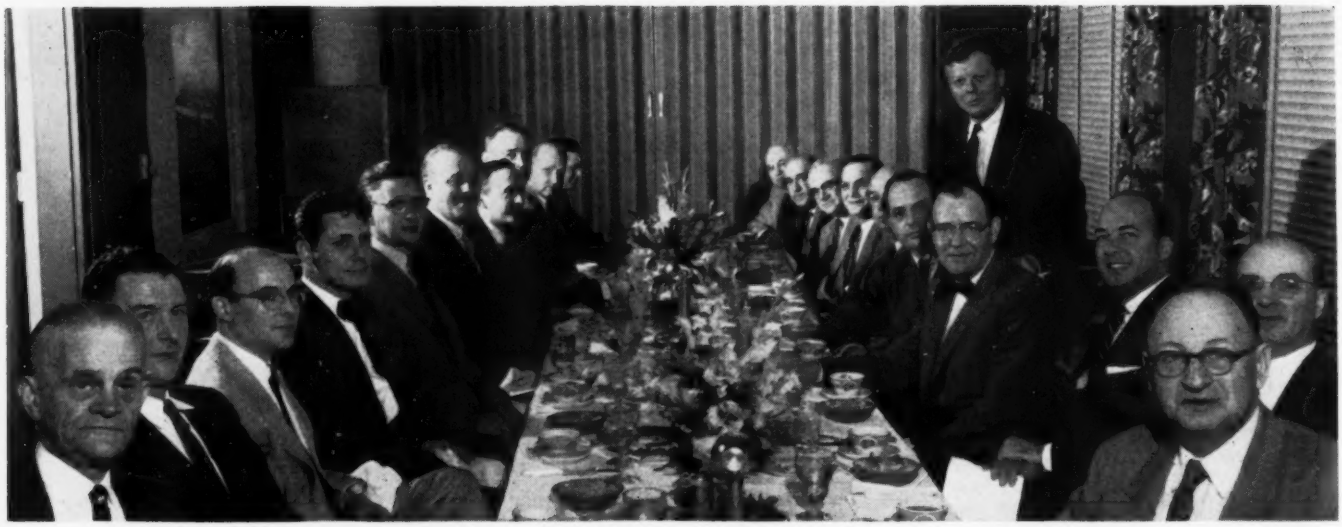
Morrison service bodies

→WRITE FOR DETAILS:

Morrison Service Body Division
MORRISON STEEL PRODUCTS, INC.
697 Amherst Street Buffalo 7, New York

• Also manufacturers of MOR-SUN Furnaces and ROLY-DOOR Steel Garage Doors

XUM



The 50th semi-annual canvass by Roland T. Beard of the Loomis Advertising Co., for the directory of the Home Telephone & Telegraph Co., Fort Wayne, was commemorated by a banquet attended by (left to right, clockwise): FRANK W. GRIFFITH, sales representative; JAMES A. DEITSCHEL, sales representative; WILLARD HART, office manager, Fort Wayne; LYNDON L. GUNDER, art director of Loomis Advertising Co., Fort Wayne; E. F. LAWMAN, sales representative; C. E. McCORMICK, vice president and general manager of Citizens Independent Telephone Co., Terre Haute; JAMES T. SCOTT, sales representative; GEORGE BREWER, Telephone Services, Chicago, Ill.; GEORGE R. ALLEN JR., secretary-treasurer of Loomis Advertising Co., Kansas City, Mo.; EARLE R. STIMSON, sales representative; JOHN G. SCHULTHEIS, of Home T&T; CARL BITZINGER, sales representative; CLYDE KAUFFMAN, sales supervisor of the Loomis company in Fort Wayne; OTTO MARAHRENS of Home T&T; ELDRIDGE KING, executive vice president of the Loomis company; WESLEY H. LOOMIS, president of Loomis Advertising Co.; EMMETT SWANSON (standing) president of Home T&T; ROLAND T. BEARD, vice president and general mcnager of Loomis; C. D. INGEBRAND, commercial manager of Home T&T; CLARENCE M. KLINGER, sales representative and LESTER P. WHITE, sales representative.

Loomis Advertising Co. Honors R. T. Beard Record

Commemorating the completion of his 50th semi-annual canvass for the directory of the Home Telephone & Telegraph Co., Fort Wayne, Ind., Roland T. Beard was honored recently with a surprise testimonial dinner. Mr. Beard is vice president and general manager of the Fort Wayne office of Loomis Advertising Co., Kansas City, Mo.

Mr. Beard was presented a gold-plated telephone of the type used by the Home T&T company in 1930 by Emmett Swanson, company president, and C. D. Ingebrand, commercial manager. In his acceptance, Mr. Beard said he was happy to report the present canvass was the best in his 25 years of selling experience for Home T&T, the advertising volume exceeding the previous all-time high by more than 10 per cent.

The progress of telephone directory advertising closely parallels the tremendous advance made by telephony, it was pointed out by Wesley H. Loomis, president of the Loomis Advertising Co., who was toastmaster of the occasion. In 1930 the Home Telephone & Telegraph Co. consisted of 37,500 stations compared with approximately 83,000 stations today.

Thumbing through the June, 1930, directory, Mr. Loomis noted it contained 127 pages of alphabetical, and 84 pages of classified advertising. This compares with 204 in the alphabetical pages and 293 classified Yellow Pages in the present issue. In 1930, cover space display advertising was accepted practice, Mr. Loomis recalled. Each funeral director's picture, with a rounded, starched collar, was in his classification. Livery stables and haybarns were listed. There were no air-conditioning or television classifications, to name a few.

Roland Beard is a native of Colby, Kan., and joined the Loomis Advertising Co. staff as a salesman in 1927. He has been a resident of Fort Wayne since 1942.

Shown comparing old and new Fort Wayne directories at the Beard testimonial dinner are (left to right): ROLAND T. BEARD, vice president cnd general manager Fort Wayne, Ind., office of Loomis Advertising Co.; EMMETT SWANSON, president, Home Telephone & Telegraph Co., Fort Wayne: ELDRIDGE KING, executive vice president of the Loomis Advertising Co., Kansas City, Mo.; CLYDE KAUFFMAN, sales supervisor of the Loomis company, Fort Wayne, and WESLEY H. LOOMIS, president of the Loomis company.

V V

Foresee TV Cable Linking America and Europe

In a paper describing details of the proposed transatlantic telephone cable 2,000 nautical miles in length between Newfoundland and Scotland presented recently at the winter general meeting of the American Institute of Electrical Engineers, four internationally-known engineers brought up the possibility of America and Europe exchanging television programs in the future.

"A transatlantic submarine television cable is a long-range goal worthy of serious study and by no means to be dismissed as impractical of eventual

attainment," the engineers concluded in their paper, "A Transatlantic Telephone Cable." The authors were M. J. Kelly and G. W. Gilman, president and director respectively, Bell Telephone Laboratories, Inc.; Sir W. Gordon Radley and R. J. Halsey, Post Office of the United Kingdom, London, England.

The engineers observed that "barring unforeseen and unexpected delays, 1956 should see the completion of the first transatlantic telephone connection via submarine cable," and it should usher in a new era of improved quality of service and reliability.

"Looking further ahead," they continued, "the transistor looms as a development which has the potentialities for making possible long, deep-water submarine cables with much greater communication capacity than can be realized with repeaters employing thermionic tubes . . . Ruggedness, long life, and small size are added attractive features of the transistor which are not of inconsiderable importance to the further development of submarine cables."

The submarine cable they described will give 35 telephone circuits across the Atlantic.

V V

Book Review

"TRANSISTOR AUDIO AMPLIFIERS," by Richard F. Shea, 219 pages. Price $6.50.

This book, published in January, 1955, by John Wiley & Sons, is on one of the practical applications for which transistors are already eligible. It covers specifications, performance curves, and specific design data.

In this fairly simple introduction, Mr. Shea writes for the engineer who is making the transition between vacuum-tubes and the new device. The book opens the way to transistor audio amplifiers that can meet specific demands for frequency response, signal-to-signal ratio, and input and output power. The final aim is in the direction of maximum reproducibility, long life, freedom from damage by temperature and humidity, and low-cost production.

The book's general treatment applies to the majority of specifications that will be available from transistor manufacturers. Mr. Shea has selected a method of representation most likely to be accepted, but also supplies tables for converting data supplied in other forms.

The author offers a wide range of practical material such as information on the variation of transistor parameters with operating point, with temperature, and between units. This data is interpreted in terms of variations in input and output resistances and power gain, so that the user is fully aware of the limitations imposed by these variable factors.

Methods of coupling transistor stages are analyzed, and examples are given of the design of amplifiers intended for varied applications, ranging from hearing aids to a high-power amplifier.

Mr. Shea is in charge of research liaison at the laboratories department of the General Electric Co. in Syracuse. Editor of "Principles of Transistor Circuits," published in 1953, he has more than 30 years of experience behind him, including pioneer work in receiver design, frequency modulation, and transistor applications. Only last year he was made a fellow of the Institute of Radio Engineers.

This book may be purchased through TELEPHONY.

V V

"Let's not make Washington the master of any free American, either through unnecessary direct intervention in his business, or through the indirect method of getting control of all the power and resources that he needs to make a living." — PRESIDENT EISENHOWER.

Here's the Neale Model K Pull Type Spinner—engineered for versatility. It's doing a great job on electric power lines . . . and telephone lines, too! Model K has a maximum capacity of three 2" O.D. cables, and will spin single cable as small as 5/8" O.D. This spinner may be used with either one or two coils of spinning wire, so you may have either a 13" spiral or wire 6½" apart. Model K is furnished with two LC5 Lashing Wire Clamps, tow rope, cable placing dolly, and chest.

Contact your jobber

Use Neale Wire For Best Results

Available in 7 different types. There's just the wire for your particular requirements.

THE WORLD IS SPINNING—TOO! PHONE 2-7234-5

Cable Spinning Equipment Co.

3100 TOPEKA AVE. TOPEKA, KANSAS

XUM

Gents: We're gonna use this space this week publicly to express our thanks to the very capable Larry O'Lilla. (The apostrophe is ours. We're promoting Larry to an Irishman.) The many extra subscribers now being served by the Chatham Telephone Company, away up there in Michigan, are grateful for the well-executed expansion program. One old-timer remarked to me in excited French-English that he would now be able to call the doctor when his wife required care.

I wonder if you folks in the telephone business will forgive me if I again assert we have the *"finest telephone subscriber carrier that it is possible to design and build."*

Our carrier should give you years and years of dependable service and bring to you many expressions of gratitude from the many new families thus provided with service.

McELROY

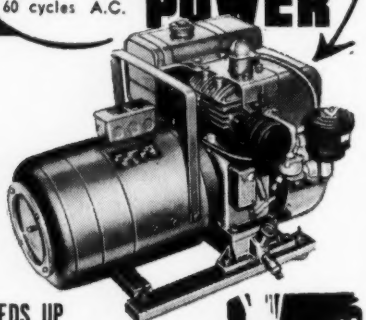
MANUFACTURING CORP.

Littleton, Massachusetts, U.S.A.

Wherever you are the job is easily done with

Katolight *Portable* **POWER**

60 cycles A.C.



SPEEDS UP WORK . . . CUTS COSTS!

Construction or maintenance is made simpler, faster and cheaper with a New Katolight Portable Power Plant. Operates saws, drills, hammers, soldering irons and other portable electrical tools and equipment.

Gasoline models from 350 Watt to 50 K.W. DC models 500 Watt through 15 K.W. in standard voltages for continuous or stand-by service. Also Multi-Frequency Ringing Power equipment.

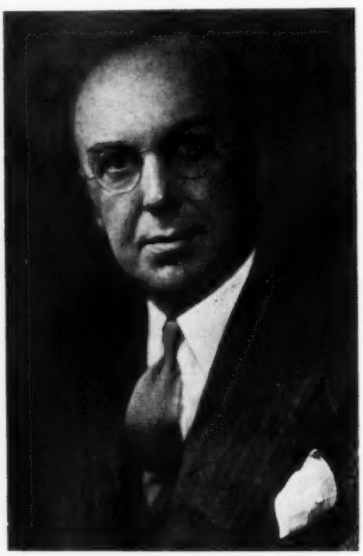
Write For Details

Katolight CORPORATION

Box 891-12, Mankato, Minnesota

Miller, Cousins and Jacobson Named to Bell System Posts

American Telephone & Telegraph Co. on Jan. 19 appointed Bartlett T. Miller vice president in charge of merchandising, a new post in the company's organization. On the same date, Sanford B. Cousins was elected vice president in charge of public relations,



B. T. MILLER

S. B. COUSINS

the office Mr. Miller has held since 1950. Also, on Jan. 19, A. F. Jacobson was elected president and a director of the Northwestern Bell Telephone Co. by its board of directors. Mr. Jacobson succeeds Mr. Cousins. The changes were effective Feb. 1.

Establishment of a merchandising department at AT&T comes at a time when the Bell System's nine-year expansion program is catching up with the backlog of demands for service.

In announcing the formation of the

A. F. JACOBSON

new department, Cleo F. Craig, AT&T president, said, "We have an ever-improving service to sell. Our merchandising department's job will be to advise and assist the Bell companies in marketing all Bell System services so that customers' desires and needs are anticipated and fully satisfied." The new department's duties, he said, will include determining market potentials for existing and new services, coordinating the merchandising plans of

HALEY

CEDAR POLES & FIR CROSS ARMS

Light in weight and clean. PENTAchlorophenol treated in our modern plant for protection against decay, moisture and insect damage.

TWO strategically located yards:

MINNEAPOLIS, MINNESOTA
FINDLAY, OHIO

R. G. HALEY & CO., Inc.

SPITZER BUILDING
TOLEDO 4, OHIO

IMMEDIATE DELIVERY

the operating companies with other programs of engineering, construction, production and sales, and the conduct of market research and studies of marketing methods and techniques.

AT&T's new merchandising head has been with the company since 1946, since 1948 as a vice president. Most of his career was spent in New England, where he rose to become vice president and general manager of New England Telephone & Telegraph Co. before joining AT&T.

Mr. Cousins goes to AT&T from Omaha, where he has been president and a director of the Northwestern Bell Telephone Co. since 1952. He began his telephone career with the New York Telephone Co. in 1920, and during the past 35 years has held many important posts in the Bell System, including vice president and general manager of the New England company and vice president of the Bell Telephone Laboratories.

Mr. Jacobson, a native of Omaha, started his career with Northwestern Bell Telephone Co. in 1922. He worked for the Lincoln (Neb.) Telephone & Telegraph Co. while attending the University of Nebraska. Following his schooling, he was again employed by Northwestern Bell in Omaha. In 1928 he was transferred to Minnesota where he served as commercial supervisor in Duluth and in commercial engineering capacities in Minneapolis.

He became district manager in Sioux Falls in 1936 and district manager in Minneapolis in 1938. In 1943 Mr. Jacobson returned to the company's general offices in Omaha. Starting in 1945, he became in succession assistant vice president, vice president and general manager of the Nebraska area, and vice president-operations.

In 1951 Mr. Jacobson accepted the position of vice president-operations with Illinois Bell Telephone Co. in Chicago. He became director of operations for the Bell System's Long Lines department in New York in 1952 and assistant vice president of the American Telephone & Telegraph Co. in 1953, the position he leaves to take the presidency of the Northwestern Bell company.

V V

Graybar Abilene, Tex., Manager

M. A. Elliston has been appointed manager of the Abilene, Tex., branch of the Graybar Electric Co., the Dallas district manager, V. A. Elmblad, has announced. This appointment was effective Feb. 1. Mr. Elliston, a native of Garland, Tex., succeeeds L. P. Bell who retired after 39 years with the company.

FOOTVILLE

Concluded from page 30

panies in Illinois, Wisconsin, and Minnesota.

Charlotte Kratz, one of the Kratz's daughters, is advertising sales manager for the Horn Telephone Directory Co. which prints and sells advertising in telephone directories throughout Wisconsin and Minnesota. In addition to this, Miss Charlotte can also hook-up a telephone, and do a pretty good job of maintaining a switchboard.

Don's other daughter, Lois, is married to George R. Kjelland. George is in the installation department of the Leich Electric Co.

At the time of the cut-over the Footville exchange served 500 stations.

This was indeed a wonderful day for the Kratz family. In their home which is next door to the telephone exchange, Mrs. Kratz presided over a fine ham dinner for all of those present at the cut-over. It took three shifts to do this. Even those who were last came out very well.

Such is the history of one more telephone exchange which now has telephone service that is as modern and dependable as that of the larger metropolitan centers.

It's a record of a life time of service with the help of a fine family.

V V

Stromberg-Carlson Announces Personnel Changes

Grant R. Loomis has been appointed assistant general traffic manager of the Stromberg-Carlson Co., according to a recent announcement by L. A. Schur, general traffic manager. Mr. Loomis has been a member of the company's traffic department since 1946.

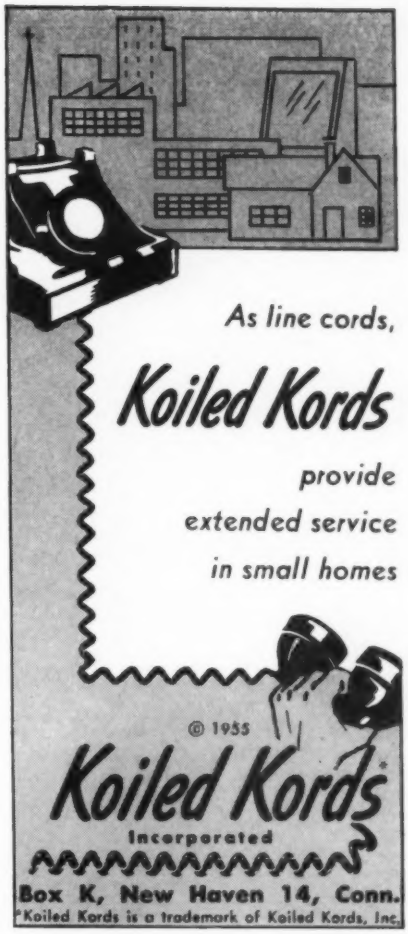
Stromberg-Carlson also announced that following 44 years of continuous service with the company, Frank Smith began his retirement on Feb. 1. He started with the company in 1910 as a telephone key assembler, and has spent his entire career in the telephone division of the company.

V V

IT&T Writes Off $11,000,000 in Losses Behind the Iron Curtain

While the International Telephone & Telegraph Corp. has written off its seized plants behind the Iron Curtain, there is still hope, it was disclosed, of recouping such losses through diplomatic channels.

The write-off is more than 11 million dollars on subsidiaries in Hungary, Czechoslovakia, Romania and other Red satellites, as well as in China.



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William H. Harrison, president of IT&T, disclosed that reserves against this loss have been set up on company books.

IT&T which has assets of more than 600 million dollars, had a net income of $11,705,764 equivalent to $1.63 a share in 1954, about the same as the year before. However, Mr. Harrison said, after a reserve for losses on the recent sale of its Coolerator division, actual earnings would run about $1.30 to $1.35 a common share.

V V

A. B. Chance Co. Establishes Canadian General Offices

The A. B. Chance Co., Centralia, Mo., is establishing the A. B. Chance Co. of Canada, Ltd., with general offices in Toronto, it has been announced by F. G. Chance, president. Mr. Chance,

W. H. WHITE

who will also serve as president of the Canadian organization, named W. H. White of Toronto as executive vice president.

White was manager of sales promotion of Canadian Line Materials, Ltd., Toronto, before joining the Chance organization. He is an associate member of the A.I.E.E.

Manufacturing plants of the Chance company are located at Centralia and St. Louis, Mo., and San Francisco, Cal.

V V

Ray-O-Vac Names Karl Bing Division Sales Manager

Announcement of the appointment of Karl Bing as sales manager, special products division, has just been made by J. A. McIlnay, vice president for sales, Ray-O-Vac Co., Madison, Wis. Since joining the organization in 1950, Bing has been successively market

KARL BING

analyst, district manager, member of the merchandising plan board, and manager, national chain sales.

In his new position he succeeds John Tennant, who has taken a new assignment in Ray-O-Vac International.

V V

1951 Telecommunications Survey Report Available

The United States Government Printing Office recently listed as still available (at a cost of $1.00) a 238-page report with tables, titled "TELECOMMUNICATIONS—A PROGRAM FOR PROGRESS."

This special report, made to the President in 1951, presents the results of a year-long survey into the problems of telecommunications both within our nation and internationally. Five specific issues are elaborated upon, and recommendations are given for the formulation of a governmental telecommunications policy, based on these issues. In the words of the report, these five problems are those of the use of the radio spectrum; telecommunication needs for national defense; international use of communication facilities; industrial considerations, and the role of the United States in meeting the pressure of the first four issues.

V V

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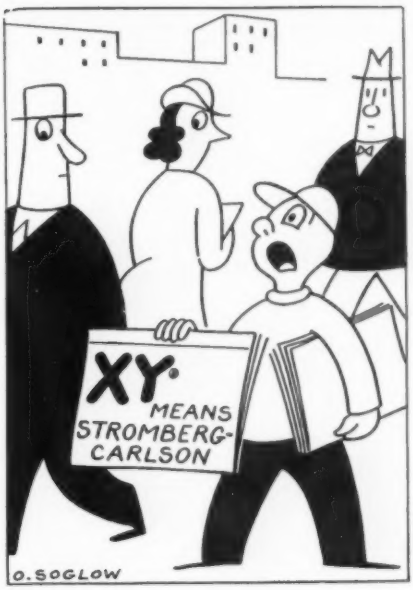

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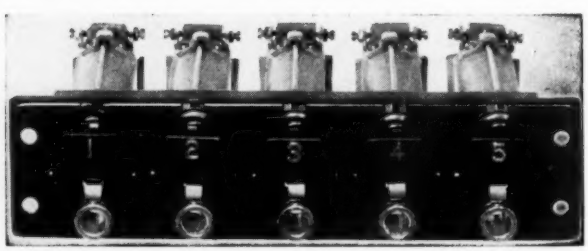

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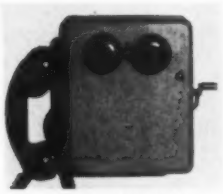

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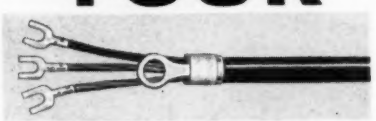

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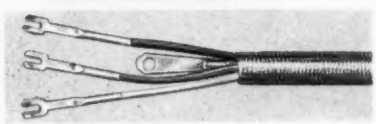

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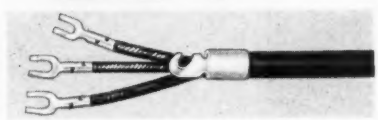

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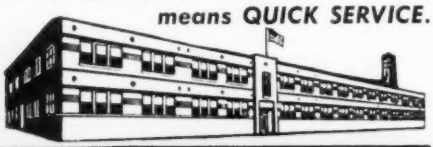

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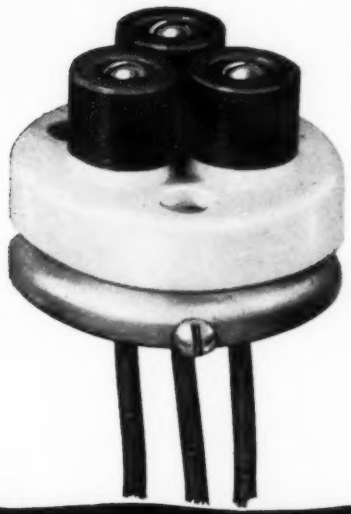

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